Pleasant Hill 2040 General Plan

Draft Environmental Impact Report State Clearinghouse #: 2022070095

prepared for

City of Pleasant Hill
Planning Division
100 Gregory Lane
Pleasant Hill, California 94523
Contact: Troy Fujimoto, City Planner

prepared by

Rincon Consultants, Inc. 449 15th Street, Suite 303 Oakland, California 94612

January 30, 2023





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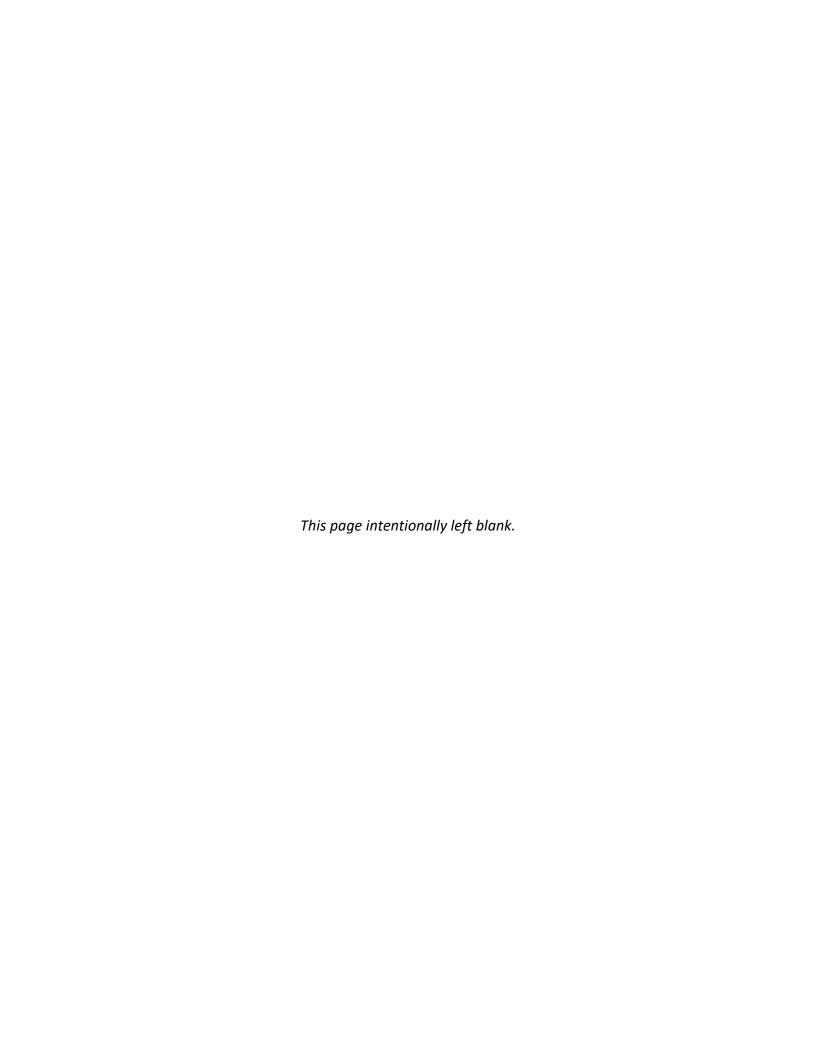


Table of Contents

Acr	onyms	and Abbi	reviations	ix
Exe	cutive	Summary	y	ES-1
	Proje	ct Synops	sis	ES-1
	Plan	Objective	25	ES-1
	Alter	natives		ES-2
	Areas	of Know	n Controversy	ES-2
	Issue	s to be Re	esolved	ES-2
	Issue	s Not Stu	died in Detail in the EIR	ES-2
	Sumr	mary of In	npacts and Mitigation Measures	ES-2
1	Intro	duction		1-1
	1.1	EIR Pur	pose, Type, and Authority	1-1
		1.1.1	Regulatory Purpose	1-1
		1.1.2	EIR Type	
		1.1.3	Legal Authority	
	1.2	Enviror	nmental Impact Report Background	
		1.2.1	Notice of Preparation	
		1.2.2	Comments Received in Response to the NOP	
	1.3	Scope a	and Adequacy	
		1.3.1	Scope and Sources	
		1.3.2	Content Adequacy	
	1.4	_	Responsible, and Trustee Agencies	
		1.4.1	Lead Agency	
		1.4.2	Responsible Agencies	
		1.4.3	Trustee Agencies	
	1.5	_	nmental Review Process	
2				
2	-		ption	
	2.1		rea Location and Setting	
		2.1.1	Regional Location	
		2.1.2	Local Setting	
	2.2	-	g Plan Area Characteristics	
	2.3	-	g Land Use Designations	
	2.4		bjectives	
	2.5	•	ed Plan Components	
	2.6		uction	
	2.7	Require	ed Actions and Approvals	2-57
3			l Impact Analysis	
	3.1	Aesthe	tics	3.1-1
		3.1.1	Environmental Setting	
		3.1.2	Regulatory Framework	3.1-14
		3.1.3	Impacts and Mitigation Measures	3.1-15
		3.1.4	Cumulative Impacts	3.1-23
	3.2	Air Qua	ality	3.2-1

	3.2.1	Introduction	3.2-1
	3.2.2	Environmental Setting	3.2-1
	3.2.3	Regulatory Framework	3.2-11
	3.2.4	Impacts and Mitigation Measures	3.2-17
	3.2.5	Cumulative Impacts	3.2-44
3.3	Biologica	al, Agriculture, and Forestry Resources	3.3-1
	3.3.1	Introduction	3.3-1
	3.3.2	Environmental Setting	3.3-1
	3.3.3	Regulatory Framework	3.3-15
	3.3.4	Impacts and Mitigation Measures	3.3-19
	3.3.5	Cumulative Impacts	3.3-36
3.4	Cultural	and Tribal Cultural Resources	3.4-1
	3.4.1	Introduction	3.4-1
	3.4.2	Environmental Setting	3.4-1
	3.4.3	Regulatory Framework	3.4-9
	3.4.4	Impacts and Mitigation Measures	3.4-17
	3.4.5	Cumulative Impacts	3.4-28
3.5	Geology	r, Soils, and Mineral Resources	3.5-1
	3.5.1	Introduction	3.5-1
	3.5.2	Environmental Setting	3.5-1
	3.5.3	Regulatory Framework	3.5-16
	3.5.4	Impacts and Mitigation Measures	3.5-19
	3.5.5	Cumulative Impacts	3.5-30
3.6	Greenho	ouse Gas Emissions and Energy	3.6-1
	3.6.1	Introduction	3.6-1
	3.6.2	Environmental Setting	3.6-1
	3.6.3	Regulatory Framework	3.6-15
	3.6.4	Impacts and Mitigation Measures	3.6-23
	3.6.5	Cumulative Impacts	3.6-44
3.7	Hazards	, Hazardous Materials, and Wildfire	3.7-1
	3.7.1	Introduction	3.7-1
	3.7.2	Environmental Setting	3.7-1
	3.7.3	Regulatory Framework	3.7-13
	3.7.4	Impacts and Mitigation Measures	3.7-26
	3.7.5	Cumulative Impacts	3.7-42
3.8	Hydrolo	gy and Water Quality	3.8-1
	3.8.1	Introduction	3.8-1
	3.8.2	Environmental Setting	3.8-1
	3.8.3	Regulatory Framework	3.8-10
	3.8.4	Impacts and Mitigation Measures	3.8-18
	3.8.5	Cumulative Impacts	3.8-30
3.9	Land Us	e Planning, Population, and Housing	3.9-1
	3.9.1	Introduction	3.9-1
	3.9.2	Environmental Setting	3.9-1
	3.9.3	Regulatory Framework	3.9-5
	3.9.4	Impacts and Mitigation Measures	3.9-9
	3.9.5	Cumulative Impacts	3.9-21
3.10	Noise		3.10-1

		3.10.1	Introduction	3.10-1
		3.10.2	Environmental Setting	3.10-1
		3.10.3	Regulatory Framework	3.10-9
		3.10.4	Impacts and Mitigation Measures	3.10-12
		3.10.5	Cumulative Impacts	3.10-30
	3.11	Public Se	ervices and Recreation	3.11-1
		3.11.1	Introduction	3.11-1
		3.11.2	Environmental Setting	3.11-1
		3.11.3	Regulatory Framework	3.11-9
		3.11.4	Impacts and Mitigation Measures	3.11-11
		3.11.5	Cumulative Impacts	3.11-24
	3.12	Transpo	rtation	3.12-1
		3.12.1	Introduction	3.12-1
		3.12.2	Environmental Setting	3.12-1
		3.12.3	Regulatory Framework	3.12-10
		3.12.4	Impacts and Mitigation Measures	3.12-17
		3.12.5	Cumulative Impacts	3.12-43
	3.13	Utilities	and Service Systems	3.13-1
		3.13.1	Introduction	3.13-1
		3.13.2	Environmental Setting	3.13-1
		3.13.3	Regulatory Framework	3.13-9
		3.13.4	Impacts and Mitigation Measures	3.13-15
		3.13.5	Cumulative Impacts	3.13-32
4	Other	CEOA Sec	ctions	4 -1
•	4.1		Inducing Impacts	
		4.1.1	Population and Employment Growth	
		4.1.2	Removal of Obstacles to Growth	
	4.2	Irreversi	ible Environmental Effects	
	4.3		ory Findings of Significance	
_				
5			S	
	5.1		ction	
	5.2	•	ant and Unavoidable Impacts	
	5.3		tives to the Proposed Plan	
	5.4	-	jectives	
	5.5		tive 1: Adopted General Plan Buildout	
		5.5.1	Description	
		5.5.2	Impact Analysis	
		5.5.3	Conclusion	
	5.6		tive 2: Increased Intensity in Non-western Areas	
		5.6.1	Description	
		5.6.2	Impact Analysis	
		5.6.3	Conclusion	5-16
	5.7	Alternat	tive 3: 25 Percent Residential Reduction	5-16
	5.7	Alternat 5.7.1	Description	5-16 5-16
	5.7	Alternat 5.7.1 5.7.2	Description Impact Analysis	5-16 5-16 5-17
	5.7 5.8	Alternat 5.7.1 5.7.2 5.7.3	Description	5-16 5-16 5-17 5-22

	5.9	Environi	mentally Superior Alternative	5-23
		5.9.1	Alternative Impacts and Meeting Objectives Comparison	
		5.9.2	Identification of Environmentally Superior Alternative	5-25
6			nd Preparers	
	6.1		tributors	
	6.2	EIR Prep	parers	6-2
Ta	bles			
Tak	ole ES-1		mary of Environmental Impacts, Mitigation Measures, and Residual	ES-3
Tak	ole 1-1	NOP	Comments and EIR Location Information	1-2
Tak	ole 2-1	Existi	ing and Proposed Plan Land Uses Components Summary	2-6
Tak	ole 2-2	Desc	ription of Proposed Pleasant Hill Land Use Designations	2-7
Tak	ole 2-3	Pleas	sant Hill Land Use Element Goals, Policies, and Programs	2-14
Tak	le 2-4	Pleas	sant Hill RHNA Allocation for 2023-2031 by Income Category	2-25
Tak	ole 2-5	Pleas	sant Hill Housing Element Goals, Policies, and Programs	2-28
Tab	ole 2-6	Pleas	sant Hill Transportation and Circulation Element Goals, Policies, and	
		Prog	rams	2-30
Tak	ole 2-7	Pleas	sant Hill Hazards and Safety Element Goals, Policies, and Programs	2-39
Tak	le 2-8	Pleas	sant Hill Environment Element Goals, Policies, and Programs	2-44
Tak	ole 2-9		sant Hill Open Space, Parks, and Recreation Element Goals, Policies, Programs	2-50
Tak	ole 2-10		sant Hill Public Facilities, Services, and Infrastructure Element Goals, ies, and Programs	2-51
Tak	ole 2-11		sant Hill Economics and Economy Element Goals, Policies, and rams	2-55
Tak	ole 3-1	Cumi	ulative Plans and Larger-scale Projects List	3-4
Tak	ole 3.1-1	Sumr	mary of Viewpoint Locations for Existing General Plan Area Views	3.1-3
Tak	ole 3.2-1	Desc	ription of Criteria Air Pollutants of National and California Concern	3.2-2
Tak	ole 3.2-2	Desc	ription of Toxic Air Contaminants of National and California Concern	3.2-5
Tak	ole 3.2-3	Fede	ral and State Air Quality Standards and SFBAAB Attainment Status	3.2-8
Tak	ole 3.2-4	Ambi	ient Air Quality Monitoring Data	3.2-10
Tak	ole 3.2-5	BAAC	QMD Odor Screening-level Distances Thresholds	3.2-18
Tak	ole 3.2-6	Clear	n Air Plan Control Measures Consistency Analysis – 2040 General Plan	3.2-21
Tak	ole 3.2-7	Net I	ncrease in 2040 General Plan Population versus VMT	3.2-38
Tak	ole 3.3-1	Vege	tation Communities and Land Cover Types in the General Plan Area	3.3-2
Tak	le 3.5-1	Appr	oximate Probability of Occurrence of Earthquake on Bay Area Faults	3.5-5
Tak	le 3.5-2	Geol	ogic Units in General Plan Area and Paleontological Sensitivity	3.5-27
Tak	ole 3.6-1	Desc	ription of Greenhouse Gases of California Concern	3.6-5
Tak	ole 3.6-2	2022	Pleasant Hill Annual GHG Emissions	3.6-10
Tak	ole 3.6-3	Califo	ornia 2021 Total System Electric Generation	3.6-11

Table 3.6-4	Transportation Energy Consumption in Contra Costa County and Pleasant	
	Hill	
Table 3.6-5	Direct Transportation Energy Use in Pleasant Hill	
Table 3.7-1	Hazardous Material Sites within General Plan Area	
Table 3.9-1	Distribution of Existing Land Uses in Pleasant Hill General Plan Area	
Table 3.9-2	2040 General Plan Consistency with PHDSP	
Table 3.9-3	2040 General Plan Consistency with Plan Bay Area 2050 Goals	3.9-16
Table 3.9-4	Plan Bay Area 2040 Pleasant Hill Population, Dwelling Units, and Employment	3.9-18
Table 3.10-1	Typical A-Weighted Noise Levels	3.10-1
Table 3.10-2	Sound Terminology	3.10-3
Table 3.10-3	Criteria for Vibration Damage Potential	3.10-4
Table 3.10-4	Existing Roadway Vehicle Noise Along Roadway Segments	3.10-5
Table 3.10-5	Maximum Noise Standards by Zoning District	3.10-11
Table 3.10-6	Typical Noise Levels for Construction Equipment	3.10-15
Table 3.10-7	Roadway Vehicle Noise Increase Along Roadway Segments	3.10-19
Table 3.10-8	Vibration Source Levels for Construction Equipment	3.10-28
Table 3.11-1	Public Schools Attendance Boundaries within General Plan Area	3.11-3
Table 3.11-2	MDUSD Student Generation Rates	3.11-5
Table 3.11-3	Existing Pleasant Hill Parks, Open Space, and Recreational Facilities Inventory	3.11-6
Table 3.11-4	Mt. Diablo Unified School District Development Impact Fees	
Table 3.11-5	2040 General Plan Student Generation	
Table 3.12-1	City of Pleasant Hill Land Use Summary by Scenario	3.12-20
Table 3.12-2	Citywide Home-Based VMT Summary	3.12-33
Table 3.12-3	Citywide Home-Work VMT Summary	3.12-33
Table 3.12-4	TDM Measures	
Table 3.12-5	Countywide VMT Summary	3.12-44
Table 3.13-1	Estimated Landfill Capacity and Closure Date	
Table 3.13-2	CCWD Current and Projected Water Demand	3.13-26
Table 3.13-3	CCWD Projected Water Supply Demand for 2040	3.13-26
Table 5-1	Alternatives Buildout Projections Summary	5-2
Table 5-2	Summary of Alternatives' Impacts	
Figures		
Figure 1-1	Environmental Review Process	1-20
Figure 2-1	Regional Location	2-2
Figure 2-2	Plan Area Location	2-3
Figure 2-3	Existing Pleasant Hill Land Use Designations Map	2-5
Figure 2-4	Proposed Pleasant Hill Land Use Designations Map	2-12

Figure 2-5	Development Focus Areas within Pleasant Hill	2-13
Figure 2-6	Pleasant Hill Housing Opportunity Sites Locations	2-27
Figure 2-7	Pleasant Hill 2040 General Plan Noise Contours	2-38
Figure 3.1-1	Pleasant Hill Visual Character Representative Photographs	3.1-2
Figure 3.1-2	Viewpoint Locations for Existing General Plan Area Views	3.1-5
Figure 3.1-3	View 1: Looking North along Pleasant Hill Road and Mangini Drive	3.1-6
Figure 3.1-4	View 2: Looking South along Taylor Boulevard near end of Mangini Drive	3.1-6
Figure 3.1-5	View 3: Looking West from Stonebridge Way	3.1-7
Figure 3.1-6	View 4: Looking North along Gregory Lane and Pleasant Hill Road	3.1-7
Figure 3.1-7	View 5: Looking East along Monument Boulevard and Marcia Drive	3.1-8
Figure 3.1-8	View 6: Looking Southeast from Contra Costa Boulevard and Gregory Lane	3.1-8
Figure 3.1-9	View 7: Looking Southwest from Contra Costa Boulevard and Woodsworth	
	Lane	3.1-9
Figure 3.1-10	View 8: Looking Southwest from Contra Costa Boulevard and Doray Drive	3.1-9
Figure 3.1-11	View 9: Looking North from Contra Costa Boulevard and Ellinwood Drive	3.1-10
Figure 3.1-12	View 10: Looking North from Contra Costa Boulevard and Golf Club Road	3.1-10
Figure 3.1-13	View 11: Looking East from Trail by Grayson Creek south of Cottonwood	
	Drive	
_	View 12: Looking West on Contra Costa Canal Trail near Gregory Lane	3.1-11
Figure 3.1-15	View 13: Looking East on Iron Horse Regional Trail between Lisa Lane and Monument Boulevard	3.1-12
Figure 3.1-16	View 14: Looking North from Contra Costa Canal Trail and Golf Club Road	3.1-12
Figure 3.1-17	View 15: Looking South at the Pleasant Hill Library from Oak Park Boulevard	3.1-13
Figure 3.3-1	Vegetation Communities and Land Cover Types in General Plan Area	3.3-3
Figure 3.3-2	Wetlands and Aquatic Resources in General Plan Area	3.3-6
Figure 3.3-3	Critical Habitat in General Plan Area	
Figure 3.3-4	Essential Connectivity Areas in General Plan Area	3.3-13
Figure 3.5-1	Geologic Map of General Plan Area	
Figure 3.5-2	Soils Underlying General Plan Area	3.5-4
Figure 3.5-3	Faults Within and Near Pleasant Hill	3.5-7
Figure 3.5-4	Liquefaction Potential within the General Plan Area	3.5-9
Figure 3.5-5	Landslide Potential within the General Plan Area	3.5-11
Figure 3.5-6	Geologic Units in General Plan Area and Paleontological Sensitivity	3.5-28
Figure 3.6-1	The Greenhouse Gas Effect	
Figure 3.6-2	2018 U.S. GHG Emissions by Gas	3.6-8
Figure 3.6-3	2020 California GHG Emissions by Scoping Plan Sectors and Sub-Sectors	3.6-9
Figure 3.7-1	Hazardous Material Sites within General Plan Area	3.7-5
Figure 3.7-2	Hazardous Material Sites within 0.25-mile of a School	3.7-6
Figure 3.7-3	Wildfire Hazard Severity Zones near Pleasant Hill	3.7-8

Figure 3.8-1	Surface Water in and Adjacent to General Plan Area	3.8-3
Figure 3.8-2	Groundwater in and Adjacent to General Plan Area	3.8-7
Figure 3.8-3	Flood Hazard Areas in and Adjacent to General Plan Area	3.8-9
Figure 3.10-1	Existing Roadway Vehicle Noise Contours	3.10-7
Figure 3.10-2	Buchanan Field Airport Noise Contours	3.10-8
Figure 3.10-3	2040 Roadway Vehicle Noise Contours	3.10-18
Figure 3.11-1	Existing Pleasant Hill Fire and Police Station Locations	3.11-2
Figure 3.11-2	Existing School Locations Serving Pleasant Hill	3.11-4
Figure 3.11-3	Existing Pleasant Hill Parks and Recreational Facility Locations	3.11-8
Figure 3.12-1	Existing Regional Highways	3.12-2
Figure 3.12-2	Existing and Approved Major Bicycle Facilities	3.12-7
Figure 3.12-3	Existing Transit Lines and Stops in General Plan Area	3.12-9
Figure 3.13-1	Water Districts in General Plan Area	3.13-2
Figure 3.13-2	Water Districts in Proposed Buildout Area	3.13-25
Annondia		

Appendices

Appendix A	NOP and Scoping Comments Received
Appendix B	Special Status Species Tables
Appendix C	Greenhouse Gas Emissions Modeling and Energy Calculations
Appendix D	Noise Calculations
Appendix E	Transportation Impact Analysis Report

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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Acronyms and Abbreviations

AB Assembly Bill

ABAG Association of Bay Area Governments

ADU accessory dwelling unit

AIRFA American Indian Religious Freedom Act

AQI Air Quality Index

BAAQMD Bay Area Air Quality Management District

BART Bay Area Rapid Transit

BAWSCA Bay Area Water Supply and Conservation Agency

BERD California State Office of Historic Preservation Built Environment Directory

BMP best management practices

C/CAG City/County Association of Governments

CAA Federal Clean Air Act

CAAQS California Ambient Air Quality Standards

CalEPA California Environmental Protection Agency

CAL FIRE California Department of Forestry and Fire Protection

CalGreen California Green Building Standards Code

CalOES California Office of Emergency Services

Cal OSHA California Division of Occupational Safety and Health

CalRecycle California Department of Resources Recycling and Recovery

Caltrans California Department of Transportation

CAP Climate Action Plan

CARB California Air Resources Board

CBC California Building Code

CCCFPD Contra Costa County Fire Protection District

CCR California Code of Regulations

CDF California Department of Finance

CDFW California Department of Fish and Wildlife

CEC California Energy Commission

CESA California Endangered Species Act

CEQA California Environmental Quality Act

CFR Code of Federal Regulations

City of Pleasant Hill

Pleasant Hill 2040 General Plan

CGC California Government Code

CHRIS California Historical Resources Information System

CNDDB California Natural Diversity Database

CNEL Community Noise Equivalent Level

CNPS California Native Plant Society

CPUC California Public Utilities Commission

CRHR California Register of Historical Resources

CRPR California Rare Plant Rank Federal Clean Water Act CWA California Water Code CWC

dB Decibel

dBA A-weighted decibel

DOC Department of Conservation

DOF Department of Finance

DPM diesel particulate matter

DTSC **Department of Toxic Substances Control**

DWR California Department of Water Resources

EBMUD East Bay Municipal Utility District

ECA Essential Connectivity Area

EIR **Environmental Impact Report**

EPA Environmental Protection Agency ESA

Federal Endangered Species Act

ESU evolutionary significant unit

FAR floor area ratio

FC District Contra Costa County Flood Control and Water Conservation District

FEMA Federal Emergency Management Agency

FHSZ Fire Hazard Severity Zone

FHWA Federal Highway Administration

FMMP Farmland Mapping and Monitoring Program

FMP Fisheries Management Plans FRA Federal Responsibility Area

FTA Federal Transit Administration

GHG greenhouse gas gpd gallons per day

GWh gigawatt-hours

HABS Historic American Building Survey

HCP Habitat Conservation Plan
HSC Health and Safety Code

HUD Federal Department of Housing and Urban Development

HVAC Heating, Ventilation and Air Conditioning

in/sec Inches per second

IPaC Information for Planning and Conservation

IPCC Intergovernmental Panel on Climate Change

L_{dn} Day-Night Average Level

 L_{eq} Equivalent Noise Level LEV Low-Emission Vehicle

LHMP Local Hazard Mitigation Plan

LID Low Impact Development

LRA Local Responsibility Area

MBTA Migratory Bird Treaty Act

MDUSD Mount Diablo Unified School District

MLD most likely descendant

MM Mitigation Measure

MTC Metropolitan Transportation Commission

NAAQS National Ambient Air Quality Standards

NAHC Native American Heritage Commission

NCCP Natural Communities Conservation Plan

NFPA National Fire Protection Association

NMFS National Marine Fisheries Service

NOP Notice of Preparation

NPDES National Pollutant Discharge Elimination System

NPPA Native Plant Protection Act

NWI National Wetlands Inventory

NWIC Northwest Information Center

OEHHA Office of Environmental Health Hazard Assessment

OES San Mateo County Office of Emergency Services

City of Pleasant Hill

Pleasant Hill 2040 General Plan

OPR California Governor's Office of Planning and Research

PG&E Pacific Gas and Electric Company

PHMC Pleasant Hill Municipal Code

PHPD Pleasant Hill Police Department

PHRPD Pleasant Hill Recreation and Park District

PPM parts per million

PQS Professional Qualifications Standards

PRC Public Resources Code

RTP Regional Transportation Plan

RHNA Regional Housing Needs Allocation

ROG reactive organic gas

RWQCB Regional Water Quality Control Board

RWS Regional Water System

SB Senate Bill

SCS Sustainable Communities Strategy
SFO San Francisco International Airport

SGMA Sustainable Groundwater Management Act

SIP State Implementation Plan

SFBAAB San Francisco Bay Area Air Basin

SFPUC San Francisco Public Utilities Commission

SFRWQCB San Francisco Bay Regional Water Quality Control Board

SHMP State of California Multi-Hazard Mitigation Plan

SLF Sacred Lands File

SR state route

SRA State Responsibility Area

SSC Species of Special Concern

SVP Society of Vertebrate Paleontology

SWPPP Stormwater Pollution Prevention Plan

SWRCB State Water Resource Control Board

TAC toxic air contaminant

TDM Transportation Demand Management

TIA Transportation Impact Analysis

TNC EV Transportation Network Company vehicles

TOD Transit-Oriented Development

UCERF Uniform California Earthquake Forecast

USACE United States Army Corps of Engineers

USC United States Code

USDA United States Department of Agriculture

USDOT United States Department of Transportation

USFWS United States Fish and Wildlife Service

USEPA United States Environmental Protection Agency

USGS U.S. Geological Survey

VDECS Verified Diesel Emission Control Strategies

VMT vehicle miles traveled

VOC volatile organic compounds

VT vehicle trips

WOTUS Waters of the United States

WQS Water Quality Standards
WUI Wildland-Urban Interface

ZEV zero-emission vehicles

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Executive Summary

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed Pleasant Hill 2040 General Plan (proposed plan). This section summarizes the characteristics of the proposed plan, alternatives to the proposed plan, and the environmental impacts and mitigation measures associated with implementation of the proposed plan.

Project Synopsis

Lead Agency Contact Person

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Project Description

This EIR has been prepared to examine the potential environmental effects of the proposed plan. The following is a summary of the full project description, which can be found in Chapter 2, *Project Description*.

As part of an overarching planning process, the City of Pleasant Hill (City) proposes to adopt an update to the City General Plan, including eight respective City General Plan elements (collectively referred to in this EIR as the 2040 General Plan).

The 2040 General Plan would serve as a long-term framework for future growth, reflect issues identified from community input and changes in State law, and update all elements of the General Plan.

Plan Objectives

The City of Pleasant Hill has the following objectives for the implementation of the proposed plan.

The City's General Plan objectives are as follows:

- Encourage smart and sensitive development;
- Foster economic diversity and sustainability;
- Provide barrier-free mobility;
- Provide balanced growth;
- Ensure public safety; and
- Support diverse housing options.

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed plan. Studied alternatives include the following three alternatives. Based on the alternatives analysis, Alternative 2 was determined to be the environmentally superior alternative.

- Alternative 1: Adopted General Plan Buildout ("No Project")
- Alternative 2: Increased Intensity in Non-western Areas
- Alternative 3: 25 Percent Residential Reduction

Refer to Chapter 5.0, Alternatives, for the complete EIR alternatives analysis.

Areas of Known Controversy

The EIR scoping process did not identify areas of known controversy for the proposed plan. Public responses to the Notice of Preparation of a Draft EIR as well as public input received at the EIR scoping meeting held by the City are summarized in Chapter 1.0, *Introduction*.

Issues to be Resolved

There are no CEQA-related issues to be resolved at this time.

Issues Not Studied in Detail in the EIR

All environmental issue areas are analyzed in detail in this EIR.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts, mitigation measures, and residual impacts (the impact after application of mitigation, if required) associated with implementation of the proposed plan. Impacts are categorized as follows:

- Significant and Unavoidable. An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the proposed plan is approved pursuant to Section15093 of the CEQA Guidelines.
- Less than Significant with Mitigation Incorporated. An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the CEQA Guidelines.
- Less than Significant. An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed plan would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact Statement	Mitigation Measure(s)	Residual Impact
Aesthetics		
Impact AES-1. The 2040 General Plan would facilitate development in areas along urbanized corridors that do not offer notable scenic vistas through the plan area. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact AES-2. development facilitated by the 2040 General Plan would not be visible from designated or eligible scenic highways. There would be no impact.	No mitigation is required.	No impact
Impact AES-3. Individual projects facilitated by the 2040 General Plan would allow for increased intensity of development on underutilized sites. Scenic quality would be protected through implementation of goals and policies in the 2040 General Plan that address visual quality. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact AES-4. Development facilitated by the proposed plan would create new sources of light or glare that could adversely affect daytime or nighttime views in the	AES-1 Revise General Plan Land Use Element to prepare a City Lighting Standards Study and implement the findings. The City shall revise the General Plan Land Use Element to include a policy that states the following:	Less than Significant with Mitigation
area. Impacts would be less than significant with mitigation incorporated.	The City shall adopt lighting standards intended to maintain ambient lighting levels after preparing a City Lighting Standards study to determine visibility, minimum glare, and minimum spillage standards in relation toother properties or into the sky. Implementation of this policy would encourage, through the regulation of the types, kinds, construction, installation and uses of outdoor electrically powered illuminating devices, lighting practices and systems to conserve energy without decreasing safety, utility, security, and productivity while enhancing nighttime enjoyment of property and night skies.	
Air Quality		
Impact AQ-1. Implementation of the 2040 General Plan would be consistent with the BAAQMD 2017 Clean Air Plan. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact AQ-2. Implementation of the 2040 General Plan would result in the generation of air pollutants during construction of individual projects, which could affect local air quality. Implementation of the proposed plan would not result in a cumulatively considerable net increase of operational criteria pollutants due to operational VMT increase. impacts would be less than significant with mitigation.

AQ-1 Adopt and Implement a New General Plan Policy to Reduce Construction Criteria Pollutant Emissions. To reduce temporary increases in criteria air pollutant emissions during the construction phase for discretionary development projects that are subject to CEQA which exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, the City shall adopt the following General Plan Policy to be implemented as part of the project approval process:

Less than Significant with Mitigation

New Policy: Require projects that exceed the BAAQMD screening sizes to evaluate project- specific construction emissions in conformance with the BAAQMD methodology and if construction-related criteria air pollutants exceed the BAAQMD thresholds of significance, require the project applicant to mitigate the impacts to a less-than-significant level.

AQ-2 Adopt and Implement a New General Plan Policy to Reduce Operational Criteria Pollutant Emissions. To reduce long-term increases in air pollutants during the operation phase for discretionary development projects that are subject to CEQA that exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, the City shall adopt the following General Plan Policy:

New Policy: Require projects that exceed the BAAQMD screening sizes to evaluate project- specific operation emissions in conformance with BAAQMD CEQA Guidelines, and if operation- related air pollutants exceed the BAAQMD-adopted thresholds of significance, require the project applicant to mitigate the impact to a less-than-significant level.

Less than Significant with Mitigation

Impact AQ-3. Construction activities for individual projects facilitated by the 2040 General Plan lasting longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. implementation of the proposed plan may also expose sensitive receptors to additional operational sources of TACs. Impacts would be less than significant with mitigation.

AQ-3 Adopt and Implement a New General Plan Policy to Conduct and Implement Construction Health Risk Assessment. To identify and reduce potential risk exposure to nearby sensitive receivers during the construction of individual projects facilitated by the 2040 General Plan, the City shall adopt the following General Plan Policy:

- New Policy: For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize equipment rated US EPA Tier 4 for equipment of 50 horsepower or more, or construction equipment fitted with Level 3 Diesel Particulate Filters for all equipment of 50 horsepower or more, and/or alternative fuel construction equipment, the project applicant shall coordinate with the City to determine if a construction health risk assessment (HRA) shall be performed. If an HRA is to be performed, the HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds:
 - Non-compliance with Qualified Community Risk Reduction Plan;
 - Increased cancer risk of > 10.0 in a million;

- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient PM_{2.5} increase of $> 0.3 \mu g/m^3$ annual average

If risk exceeds the thresholds, measures such as requiring the use of Tier 4 engines, Level 3 Diesel Particulate Filters, and/or alternative fuel construction equipment shall be incorporated to reduce the risk to appropriate levels.

AQ-4 Adopt and Implement a New General Plan Policy to Reduce Operational Toxic Air Contaminants. To ensure sensitive receptors are not exposed to toxic air contaminant emissions during the operation phase for discretionary development projects that are subject to CEQA which exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, the City shall adopt the following General Plan Policy:

- New Policy: Require applicants for industrial or warehousing land uses or commercial land uses that would generate substantial diesel truck travel (i.e., 100 diesel trucks per day or 40 or more trucks with diesel-powered transport refrigeration units per day) to contact BAAQMD to determine the appropriate level of operational health risk assessment (HRA) required. If required, the operational HRA shall be prepared in accordance with the Office of Environmental Health Hazard Assessment and BAAQMD requirements and mitigated to an acceptable level. Typical measures to reduce risk impacts may include, but are not limited to:
 - Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible.
 - b. Electrifying warehousing docks.
 - c. Truck Electric Vehicle (EV) Capable trailer spaces.
 - d. Requiring use of newer equipment and/or vehicles.
 - e. Restricting off-site truck travel through the creation of truck routes.

Impact AQ-4. The 2040 General Plan could create objectionable odors that could adversely affect a substantial number of people. Impacts related to odors would be less than significant with mitigation.

AQ-5 Adopt and Implement a New General Plan Policy to Reduce Operational Odor Impacts. To reduce odor impacts associated with development facilitated by the 2040 General Plan, the City shall adopt the following General Plan Policy to be implemented as part of the project approval process:

New Policy: Odor Impacts. Consider odor impacts when evaluating land uses and development projects near wastewater treatment plants, treatment plant expansion projects, waste transfer stations, and other odor potential sources per the latest BAAQMD screening distances and guidelines. Less than Significant with Mitigation

Biological, Agricultural, and Forestry Resources

Impact BIO-1. Development facilitated by the 2040 General Plan could result in direct or indirect impacts to special-status species or their associated habitats including impacts to migratory bird nest sites. Impacts would be less than significant with mitigation incorporated.

BIO-1 Add a General Plan Program to Conduct Pre-Construction Bird Surveys and Implement Avoidance and Minimization Measures. The City shall add a 2040 General Plan Environment Element Program to include the following requirements for nesting bird surveys, avoidance, and minimization measures:

For construction activities initiated during the bird nesting season (February 1 – September 15) involving removal of vegetation that could potentially serve as habitat for special-status bird species or other nesting bird habitat, including abandoned structures and other manmade features, a pre-construction nesting bird survey shall be conducted no more than 14 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in California Bay Area communities (i.e., qualified biologist). If nests are found, an avoidance buffer shall be determined by a qualified biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the City prior to the commencement of construction activities.

Future project site plans shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15 and what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities.

BIO-2 Add a General Plan Program to Conduct Pre-Construction Roosting Bats Surveys and Implement Avoidance Measures Prior to Removal. The City shall add a 2040 General Plan Environment Element Program to include the following requirements for roosting bat surveys and avoidance measures prior to removal:

Less than Significant with Mitigation

Prior to the removal or alteration of trees and structures that may serve as roosting habitat for special-status bat species, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on site. Tree or structure removal shall be planned for either the spring or the fall and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the City within 30 days of the survey, after which no further action will be required.

If day roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the City's approval. The plan shall incorporate the following guidance as appropriate:

- When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity, including the following:
 - a) Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs.
 - b) Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs.
- If a tree /structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures that consist of (or exceed) the following:
 - a) If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure.
 - b) If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31).
- Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two.

Impact Statement	Mitigation Measure(s)	Residual Impact
	 Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required. If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. 	
Impact BIO-2. Development facilitated by the 2040 General Plan could adversely impact riparian habitat, other sensitive natural communities, or protected wetlands in the General Plan area. Implementation of federal, State, and local regulations and policies would ensure riparian habitat and wetlands are not significantly impacted. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact BIO-3. Development facilitated by the 2040 General Plan would avoid impacts to wildlife movement corridors by conserving Open Space areas in the General Plan area, as directed by policies in the 2040 General Plan. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact BIO-4. Development facilitated by the 2040 General Plan would be required to conform with applicable local policies and ordinances protecting biological resources. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact BIO-5. Development facilitated by the 2040 General Plan would not conflict with an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. No impact would occur.	No mitigation is required.	No Impact
mpact BIO-6. Development facilitated by the 2040 General Plan would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use nor conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.	No mitigation is required.	No Impact
mpact BIO-7. Development facilitated by the 2040 General Plan would not result in the conversion of land used for forestry purposes nor conflict with existing coning for forestry or timberland use. No impact would occur.	No mitigation is required.	No Impact
Cultural and Tribal Cultural Resources		
Impact CR-1. The 2040 General Plan has the potential	CR-1 Revise General Plan Implementation Program M to Include Preparation of Historical	Significant and

Impact CR-1. The 2040 General Plan has the potential to result in significant impacts if development carried out under the plan would cause a substantial adverse change in the significance of a historical resource. this impact would be significant and unavoidable even with mitigation.

CR-1 Revise General Plan Implementation Program M to Include Preparation of Historical Resources Evaluation prior to Approval for Projects Involving Buildings 45 years or Older and Implementation of Mitigation Prior to and During Construction. The City shall revise 2040 General Plan Environment Element Program M to include that, in addition to updating the existing historical and cultural resources survey, a historical resources evaluation shall be prepared prior to approval of a project carried out under the 2040 General Plan involving the demolition or substantial alteration of a building, structure, object, or other built environment feature that is 45 years of age or older.

The City shall add further details to 2040 General Plan Program M that state the following:

■ The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards in architectural history or history (as defined in Code of Federal Regulations, Title 36, Part 61). The qualified architectural historian or historian shall conduct an intensive-level evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify potential historical resources within the proposed development site. All properties 45 years of age or older shall be evaluated within their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and concurrence. If the property is already listed in the NRHP or CRHR, the historical resources evaluation described above shall not be required.

Significant and Unavoidable

- If historical resources are identified within the site of a proposed development, efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the Professional Qualification Standards, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources evaluation report shall also identify and specify the treatment of character-defining features and construction activities.
- Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the Professional Qualification Standards. In conjunction with a development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how a project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.
- If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. Mitigation measures may include documentation of the historical resource in the form of a Historic American Building Survey (HABS) report, or equivalent. The report shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Professional Qualification Standards and submitted to the City prior to issuance of any permits for demolition or alteration of the historical resource.

Impact CR-2. The 2040 general Plan has the potential to result in significant impacts if development carried out under the plan would cause a substantial adverse change in the significance of an archaeological resource, including those that qualify as historical resources. This impact would be less than significant with mitigation.

CR-2 Revise General Plan Implementation Program M to Include Preparation of Archaeological Resources Assessment Prior to Project Approval and Implementation of Mitigation Prior To and During Construction. The City shall revise 2040 General Plan Environment Element Program M to include that, in addition to updating the existing historical and cultural resources survey, prior to approval of a project that involves ground disturbance activities in native or previously undisturbed soils that may include, but are not limited to, pavement removal, potholing, grubbing, tree removal, excavation or grading, an archaeological resources assessment shall be prepared under the supervision of an

Less than Significant with Mitigation

archaeologist that meets the Secretary of the Interior's Professional Qualification Standards in either prehistoric or historic archaeology.

The City shall add further details to 2040 General Plan Program M that state the following:

- Assessments shall include a California Historical Resources Information System records search at the Northwest Information Center (NAHC) and a Sacred Lands File search maintained by the Native American Heritage Commission. The records searches will characterize the results of previous cultural resource surveys and disclose any cultural resources that have been recorded and/or evaluated in and around a project site. A Phase I pedestrian survey shall be undertaken at a project site that is on previously undeveloped land in order to locate any surface cultural materials. By performing a records search, consultation with the NAHC, and a Phase I survey, a qualified archaeologist shall be able to classify a project site as having high, medium, or low sensitivity for archaeological resources.
- If the Phase I archaeological survey identifies resources that may be affected by a project, the archaeological resources assessment shall also include Phase II testing and evaluation. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific mitigation measures shall be identified in the Phase II evaluation. These measures shall include, but would not be limited to, a Phase III data recovery program, avoidance, or other appropriate actions to be determined by a qualified archaeologist in consultation with the City and any interested Tribes, as stated in the 2040 General Plan Tribal Consultation Implementation Program outlined by Goal ENV-5. If significant archaeological resources cannot be avoided, impacts may be reduced to less-than-significant levels by filling on top of the sites rather than cutting into a cultural deposits. Alternatively, and/or in addition, a data collection program may be warranted, including mapping the location of artifacts, surface collection of artifacts, or excavation of the cultural deposit to characterize the nature of the buried portions of sites. Curation of the excavated artifacts or samples shall occur as specified by the archaeologist in consultation with the City and any interested Tribes. As stated in the 2040 General Plan Tribal Consultation Implementation Program outlined by Goal ENV-5, the final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes. If Native American tribes do not accept the artifact, it shall be offered to an institution staffed by qualified professionals, as determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.

CR-3 Revise General Plan Goal ENV-5 to Include a Policy to Stop Work in the Event of Unanticipated Cultural Resources Discoveries During Construction. The City shall revise the 2040 General Plan Environment Element Goal ENV-5 to include a policy that, if cultural

Impact Statement	Mitigation Measure(s)	Residual Impact
	resources are encountered during ground-disturbing activities for a project, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology in either prehistoric or historic archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by a project, additional work such as excavating the cultural deposit to fully characterize its extent, and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. In the event that archaeological resources of Native American origin are identified during project construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures.	
Impact CR-3. The discovery of human remains is always a possibility during ground-disturbing activities. Ground disturbance associated with development carried out under the 2040 General Plan may disturb or damage known or unknown human remains. This impact would be less than significant with adherence to existing regulations.	No mitigation is required.	Less than Significant
Impact CR-4. Development facilitated by the 2040 general plan has the potential to impact unidentified tribal cultural resources. Impacts would be less than significant with mitigation.	CR-4 Revise General Plan Goal ENV-5 to Include a Policy to Suspend Work around Tribal Cultural Resources Identified During Construction. The City shall revise the 2040 General Plan Environment Element Goal 5 to include a policy that in the event that cultural resources of Native American origin are identified during construction of a project implemented under the 2040 General Plan, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and, thus, significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with local Native American group(s). The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.	Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
Geology/Soils and Mineral Resources		
Impact GEO-1. The 2040 General Plan is not located within an Alquist Priolo Earthquake Fault Zone, and, therefore, the proposed plan would not be subject to effects involving rupture of a known earthquake fault. There would be no impact.	No mitigation is required.	No Impact
Impact GEO-2. Development facilitated by the proposed plan could result in exposure of people or structures to a risk of loss, injury, or death from seismic events. Development facilitated by the proposed plan could be located on a geologic unit or soil that is unstable or could become unstable resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. However, with compliance with applicable laws, regulations, and applicable General Plan Goals and Policies, this impact would be less than significant.	No mitigation is required.	Less than Significant
Impact GEO-3. Construction facilitated by the 2040 General Plan would include ground disturbance such as excavation and grading that would result in loose or exposed soil. Disturbed soil could be eroded by wind or rain during a storm event, which could result in the loss of topsoil. Adherence to existing regulatory requirements would ensure that this impact would be less than significant.	No mitigation is required.	Less than Significant
Impact GEO-4. Future seismic events could result in liquefaction and lateral spreading of soils within the city. Development in the General Plan area could be subject to liquefaction hazards. Compliance with the CBC would reduce liquefaction hazards. Proposed Health, Safety, and HazMat goals and policies apply to development facilitated by the proposed plan in hazard zones for liquefaction or lateral spreading of soils. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact GEO-5. Development facilitated by the 2040 General Plan would occur on urbanized sites that are served by existing sanitation infrastructure. New development would not include septic systems. There would be no impact.	No mitigation is required.	No Impact
Impact GEO-6. Development facilitated by the 2040 General Plan has the potential to impact paleontological resources. Impacts would be less than significant with mitigation incorporated.	 GEO-1 Adopt and Implement a New General Plan Policy to Protect Paleontological Resources. The City of Pleasant Hill shall add a policy (or policies) providing for the protection of paleontological resources to the 2040 General Plan prior to its adoption. The policy (policies) shall include the following: A Qualified Professional Paleontologist (as defined by SVP¹³) must be retained to conduct a paleontological resources analysis prior to the beginning of projects involving ground disturbance in geologic units with high paleontological sensitivity to determine whether there is a potential for significant impacts to paleontological resources. If potential impacts to paleontological resources are found to be significant, then a Qualified Professional Paleontologist shall be retained to develop and implement a Paleontological Resources Mitigation Program to ensure that impacts to paleontological resources are less than significant. 	Less than Significan with Mitigation
Impact GEO-7. Development facilitated by the 2040 General Plan would not have the potential to impact mineral resources. There would be no impact.	No mitigation is required.	No Impact
Greenhous Gas Emissions and Energy		
Impact GHG-1. Pleasant Hill does not have a Climate Action Plan. Therefore, implementation of the 2040 General Plan would not meet State 2030 and 2045 goals. Mitigation Measures GHG-1 and GHG-2 would result in adoption of CEQA GHG thresholds and a Climate Action Plan; however, development facilitated by the 2040 General Plan would not meet the 2030 and 2045 goals until the CAP is adopted. this impact would be significant and unavoidable.	GHG-1 Revise General Plan Policy ENV 8.1 to Reflect Latest State and BAAQMD GHG Emissions Targets. The City shall revise 2040 General Plan Environment Element Policy ENV 8.1 (Meet State Emission Reduction Targets) to reflect the latest State and BAAQMD GHG emissions targets of 40 percent below 1990 levels by 2030 (pursuant to SB 32) and carbon neutrality by 2045 (pursuant to AB 1279). GHG-2 Revise General Plan Program O to Include Details Related to Adoption and Implementation of a Climate Action Plan and CEQA GHG Emissions Thresholds. The City shall add further details to 2040 General Plan Environment Element Program O (Climate Action) that state the following:	Significant and Unavoidable
	The City shall adopt the Pleasant Hill Climate Action Plan by Summer 2024 and include targets that reflect those set by SB 32 to reduce GHG emissions by 40 percent below the 1990 levels by 2030 and AB 1279 to achieve carbon neutrality by 2045. Implementation measures in the CAP to achieve the 2030 and 2045 targets shall include, but are not limited to, the following:	

Impact Statement	 Mitigation Measure(s) Develop and adopt Zero Net Energy requirements for new and remodeled residential and non-residential development; Develop and adopt a building electrification ordinance for existing and proposed structures; Expand charging infrastructure and parking for electric vehicles; Implement carbon sequestration by expanding the urban forest, participating in soil-based or compost application sequestration initiatives, supporting regional open space protection, and/or incentivizing rooftop gardens; and Implement policies and measures included in the 2017 and 2022 California Climate Change Scoping Plans, such as mobile source strategies for increasing clean transit options and zero emissions vehicles by providing electric vehicle charging stations. The City shall also adopt Pleasant Hill CEQA GHG Emissions Thresholds of Significance that 	Residual Impact
	are consistent with the Pleasant Hill Climate Action Plan by Summer 2024 for use in future CEQA GHG emissions analyses through 2030 and consistent with SB 32. In addition, upon completion of future Climate Action Plan updates and as necessary, the City shall update the CEQA GHG emissions threshold of significance to be consistent with each climate action plan update.	
Impact GHG-2. The 2040 General Plan would implement a land-use strategy and policies that would promote greater overall energy efficiency. Wasteful, inefficient, or unnecessary consumption of energy would not occur. impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact GHG-3. The 2040 General Plan would be consistent with applicable energy efficiency goals and regulations, including relevant provisions of CALGreen and California Energy Code Title 24. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Hazards/Hazardous Materials and Wildfire		
Impact HAZ-1. Development facilitated by the 2040 General Plan could result in the release of potentially hazardous materials, which may occur within 0.25 mile of a school. However, compliance with local, regional, State, and federal regulations related to hazardous materials would minimize the risk of releases and exposure to these materials. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact HAZ-2. Development facilitated by the 2040 General Plan could result in development on sites contaminated with hazardous materials. However, compliance with applicable regulations relating to site remediation	No mitigation is required.	Less than Significant
Impact HAZ-3. Development facilitated by the 2040 General Plan would not result in significantly increased airport and airstrip activity. Compliance with State and federal regulations, Contra Costa Airport Land Use Compatibility Plan, and proposed 2040 General Plan policies would minimize safety hazards and disturbance to people residing or working within proximity of the Buchanan Field Airport. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact HAZ-4. Development facilitated by the 2040 General Plan would result in additional population and vehicle miles traveled in the city. However, the proposed plan would not result in changes to emergency evacuation routes nor would substantially increase roadway congestion such that the use of an evacuation route would be hindered. Impacts would be less than significant.	 HAZ-1: Adopt and Implement a New General Plan Policy to Conduct Project Design Review for Wildfire Risk Reduction. The City shall include a new 2040 General Plan Hazards and Safety Element policy as follows: Project landscape plans shall include fire-resistant vegetation native to Contra Costa County and/or the local microclimate of the site and prohibit the use of fire-prone species especially non-native, invasive species. If the project site is within a known landslide area, the site shall be subject to geotechnical review regarding potential post-fire slope instability. Structural engineering features incorporated into the design of the structure to reduce the risk of damage to the structure from post-fire slope instability shall be recommended by a qualified engineer and approved by the City prior to the building permit approval. HAZ-2: Construction Wildfire Risk Reduction. The City shall require the following measures during project construction: 1. Construction activities with potential to ignite wildfires shall be prohibited during red-flag warnings issued by the National Weather Service for the site. Example activities include welding and grinding outside of enclosed buildings. 2. Fire extinguishers shall be available onsite during project construction. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher. 	Significant and Unavoidable

Impact Statement	Mitigation Measure(s)	Residual Impact
	 Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance. 	
	At the City's discretion, additional wildfire risk reduction requirements may be required during construction. The City shall review and approve the project-specific methods to be employed prior to building permit approval.	
	HAZ-3: Project Design Wildfire Risk Reduction. Project landscape plans (as made available when project applications are submitted) shall include fire-resistant vegetation native to Contra Costa County and/or the local microclimate of the site and prohibit the use of fire-prone species especially non-native, invasive species.	
	If the project site is within a known landslide area (see Figure 3.5-5 in Section 3.5, <i>Geology, Soils, and Mineral Resources</i>), the site shall be subject to geotechnical review regarding potential post-fire slope instability. Structural engineering features incorporated into the design of a structure to reduce the risk of damage to the structure from post-fire slope instability shall be recommended by a qualified engineer and approved by the City prior to the building permit approval.	
Impact HAZ-5. Emergency response and evacuation procedures would not be affected by the 2040 General Plan. Pleasant Hill is not located within or near a Very High Fire Hazard Severity Zone or State Responsibility area; however, portions of Pleasant Hill are located in and near a High Fire Hazard Severity Zone, a Local Responsibility area, and areas of vegetated open space. compliance with applicable codes and regulations would not fully reduce the risk of loss, injury, or death from wildfire associated with 2040 General Plan development. This impact would be significant and unavoidable even with mitigation.	Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 would apply.	Significant and Unavoidable

Impact Statement	Mitigation Measure(s)	Residual Impact
Hydrology and Water Quality		
Impact HYD-1. Implementation of the 2040 General Plan would involve ground-disturbing activities during construction that could temporarily increase the potential for water quality to be affected by sedimentation or an accidental spill or release of hazardous materials. However, with adherence to applicable water quality standards, waste discharge requirements, and proposed General Plan policies, impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact HYD-2. Development facilitated by the 2040 General Plan would not pump water from the local groundwater basin and would not introduce substantial new areas of impermeable surfaces such that the rates or patterns of groundwater recharge from infiltration would be affected. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact HYD-3. Development facilitated by the 2040 General Plan would not alter the course of a stream or river or substantially alter existing drainage patterns, including through new impervious surfaces, and regulatory requirements as well as policies to protect and improve drainage patterns would minimize erosion, flooding, and runoff. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact HYD-4. Development facilitated by the 2040 General Plan would not increase existing potential for inundation within flood hazard areas to occur and would not introduce substantial new pollutant sources that could potentially be released due to inundation. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact HYD-5. Development facilitated by the 2040 General Plan would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement	Mitigation Measure(s)	Residual Impact
Land Use/Planning and Population/Housing		
Impact LU-1. Implementation of the proposed 2040 General Plan would maintain orderly development in Pleasant Hill and would not physically divide an established community. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact LU-2. Implementation of the 2040 General Plan would be generally consistent with applicable land use plans, policies, or regulations adopted to avoid or mitigate environmental effects, such as ABAG/MTC Plan Bay Area 2050. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact LU-3. Implementation of the proposed plan would facilitate the construction of new housing in Pleasant Hill. Proposed development could result in an increase in population that would exceed ABAG population forecasts by 122 percent by 2040. However, the proposed plan is intended to accommodate and plan for population growth. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact LU-4. Development facilitated by the proposed plan would not result in the displacement of substantial numbers of housing or people. The proposed plan would facilitate the development of new housing in accordance with State and local housing requirements, while preserving existing residential neighborhoods. Impacts would be less than significant.	No mitigation is required.	Less than Significant

Impact Statement Mitigation Measure(s) Residual Impact

Noise

Impact NOI-1. Construction of individual projects facilitated by the 2040 General Plan would temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses. Development facilitated by the 2040 General Plan would also introduce new noise sources and contribute to increases in operational noise. The continued regulation of noise, consistent with the City Code and implementation of proposed 2040 General Plan policies would minimize disturbance to adjacent land uses. However, construction and operational mobile noise could exceed standards. This impact would be significant and unavoidable even with mitigation.

NOI-1 Adopt and Implement a New General Plan Policy to Update the Zoning Ordinance to Implement Construction Noise Reduction Measures. To minimize noise during construction, the City shall adopt the following 2040 General Plan Hazards and Safety Element policy to update the Zoning Ordinance to include the following:

- New Policy: Construction contractors shall implement the following measures for construction activities conducted within the City. Construction plans submitted to the City shall include construction noise analysis and identify these measures on demolition, grading, and construction plans submitted to the City. The City of Pleasant Hill Building Division shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading and/or building permits.
 - Mufflers. During excavation and grading construction phases, all construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards.
 - Stationary Equipment. All stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers.
 - Equipment Staging Areas. Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers.
 - Smart Back-up Alarms. Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction in compliance with applicable safety laws and regulations.
 - Electrically-Powered Tools and Facilities. Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities, where feasible.
 - Noise Disturbance Coordinator. The project applicant shall designate a "noise disturbance coordinator" responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint and shall require that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator and the City shall be posted at the construction site.

Significant and Unavoidable

Impact Statement Mitigation Measure(s) Residual Impact

Temporary Noise Barriers. Erect temporary noise barriers, where feasible, when construction noise is predicted to exceed the acceptable standards (e.g., 80 dBA Leq at residential receivers, schools or other sensitive receptors during the daytime) and when the anticipated construction duration is greater than is typical (e.g., two years or greater). Temporary noise barriers shall be constructed with solid materials (e.g., wood) with a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. If a sound blanket is used, barriers shall be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated sound transmission class (STC) 32 or higher.

Impact NOI-2. Development facilitated by the 2040 General Plan near major transportation-noise sources may experience noise levels that exceed noise land use compatibility standards but would not result in a direct increase in airport and airstrip activity. Proposed General Plan policies require analysis of projects that may exceed contours for exterior noise compliance. The continued regulation of airport noise consistent with State and federal regulations and implementation of proposed General Plan policies and the Contra Costa Airport Land Use Compatibility Plan would also minimize disturbance to people residing or working in proximity of the Buchanan Field Airport. Impacts would be less than significant.

No mitigation would be required

Less than Significant

Impact NOI-3. Construction of individual projects facilitated by the 2040 General Plan would temporarily generate groundborne vibration and noise, potentially affecting nearby land uses. Operation of development facilitated by the 2040 General Plan would not result in substantial groundborne vibration and noise. This impact would be less than significant with mitigation.

NOI-2 Adopt and Implement a New General Plan Policy to Update the Zoning Ordinance to Implement Construction Vibration Control Measures. To reduce potential construction vibration impacts, the City shall adopt the following 2040 General Plan Hazards and Safety Element policy to update the Zoning Ordinance to include the following:

New Policy: Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures such as historical resources, 100 feet of non-engineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); a vibratory roller within 40 feet of fragile historical resources or 25 feet of any other structure; or a dozer or other large earthmoving equipment within 20 feet for a fragile historical structure or 15 feet of any other structure, the project applicant shall prepare a groundborne noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these construction activities. This noise and vibration analysis shall be

Less than Significant with Mitigation

Impact Statement	Mitigation Measure(s)	Residual Impact
	conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving, static rollers as opposed to vibratory rollers, and lower horsepower earthmoving equipment shall be used. If necessary, construction vibration monitoring shall be conducted to ensure FTA vibration thresholds are not exceeded.	
Public Services & Recreation		
Impact PS-1. Development facilitated by the 2040 General Plan would increase the population of Pleasant Hill, generating additional need for fire protection services. However, compliance with the 2040 General Plan would result in impacts related to the need for new or altered fire facilities that are less than significant.	No mitigation is required.	Less than Significant
Impact PS-2. Development facilitated by the 2040 General Plan would increase population in Pleasant Hill, generating additional need for police protection services. However, compliance with 2040 General Plan policies would result in impacts related to the need for new or altered police facilities that are less than significant.	No mitigation is required.	Less than Significant
Impact PS-3. Development facilitated by the 2040 General Plan would result in an increase in population of school-aged children in Pleasant Hill. This would increase demand for school services and potentially create the need for new school facilities. Operational impacts of new school facilities would be less than significant with payment of school impact fees. However, even with compliance with 2040 General Plan policies, impacts related to the construction of new or altered school facilities would be significant and unavoidable due to the large amount of new school land uses facilitated by the 2040 General Plan.	Mitigation Measures AQ-1, AQ-3, CR-1, CR-2, CR-3, CR-4, GEO-1, NOI-1, and NOI-2 would apply.	Significant and Unavoidable

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact PS-4. Development facilitated by the 2040 General Plan would result in an increase in Pleasant Hill population. This would increase demand for and use of parks and potentially create the need for new or altered park and recreational facilities. However, compliance with 2040 General Plan policies would result in impacts related to increased use or the need for new or altered parks or recreational facilities that are less than significant.	No mitigation is required.	Less than Significant
Impact PS-5. Development facilitated by the 2040 General Plan would result in an increase in the City's population. This would increase demand for public facilities and potentially create the need for new public facilities, including libraries. However, compliance with 2040 General Plan policies would result in impacts related to need for new or altered public facilities that are less than significant.	No mitigation is required.	Less than Significant
Transportation and Traffic		
Impact TRA-1. Implementation of the 2040 General Plan would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, bicycle, and pedestrian facilities; however, implementation could conflict with a policy addressing roadway facilities. Construction impacts would not conflict with the circulation system. impacts would be less than significant with mitigation.	No mitigation is required.	Less than Significant
Impact TRA-2. Implementation of the 2040 General Plan would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). impacts would be significant and unavoidable even with mitigation.	 TRA-2 Prepare and Implement a TDM Plan with TDM Programs. The CCTA's Growth Management Program Implementation Guide (Revised February 17, 2021), Appendix F (CCTA Recommended Methodology) describes options for mitigation of VMT impacts. The first two options below apply to development project and plans, and the third applies at a Citywide scale. 1. The project applicant shall modify the project's characteristics to reduce VMT generated by the project prior to issuance of an occupancy permit. This might involve changing the density or mixture of land uses on the project site, or changing the project's location to one that is more accessible by transit or other travel modes. 	Significant and Unavoidable

Impact Statement Mitigation Measure(s) Residual Impact

- 2. The project applicant shall implement transportation demand management (TDM) or physical design measures to reduce VMT generated by the project prior to issuance of an occupancy permit.
- 3. The City shall participate in a CCTA-approved VMT impact fee program and/or VMT mitigation exchange/banking program, when it is completed and published by CCTA. (Note that CCTA is developing such a program for Contra Costa County.)

The City shall require preparation and implementation of project-level TDM Plans with the following TDM measures for future land use development projects facilitated by the 2040 General Plan that do not meet CCTA screening criteria and thresholds.

Table 3.12-5: TDM Measures

CAPCOA Handbook Measure	Types of Projects	Core Elements
T-7: Commute Trip Reduction Marketing	Employment- based	*Thoughtful marketing strategy *Readily available commute information *Designated TDM Coordinator *Guaranteed Ride Home
T-8: Provide Ridesharing Program	Employment- based	*Participation in a TMA with ride-matching program *Preferential parking policies for carpools *Promotions and incentives such as gas cards at carpool formation
T-9: Implement Subsidized or Discounted Transit Program	Residential, School, Employment- based	*Location within 1/2 mile of major transit stop or high-quality transit corridor *Participation in Commuter Benefits Program *Easy to sign up for incentives
T-11: Provide Employer Sponsored Vanpool / Point-to- Point Shuttles	Employment- based	*Coordinate logistics of vanpool program *Cover vanpool fares for riders through commute benefits program *Promote and facilitate vanpool creation
T-12: Price Workplace Parking	Employment- based	*Location within 1/2 mile of transit service *Priced at least \$5 per day *On-street parking nearby is not readily available

Impact Statement	Mitigation Measure(s)			Residual Impact
	T-13: Implement Employee Parking Cashout	Employment- based	*Parking is provided as benefit *On-street parking nearby is not readily available *Participants pledge to not drive to work	
	T-16: Unbundle Residential Parking Costs	Residential	*On-street parking nearby is not readily available *All parking is priced at a rate at least \$30 per month	
	T-23: Community-Based Travel Planning	Residential, Retail, School	*Proactive outreach to all households in service area or project *Program Coordinator designated as lead in promoting non-auto transportation	
	T-10: Provide End-of-Trip Bicycle Facilities	All Projects	*Provision of secure bicycle parking in the form of lockers, a locked storage room, or an attended storage facility *(For non-residential): Provision of lockers, showers, and changing rooms	
	T-21A: Implement Carshare Program / Provide Carshare Parking	All Projects	*Dedicate parking for carshare vehicles *Identify carshare partner	
	T-15 Reduce Parking Supply	Residential	*On-street parking nearby is not readily available	
	T-18: Provide Pedestrian Network Improvements:	All Projects	Completion of one or more projects identified in the Solano County Active Transportation Plan	
	T-19-A and T-19-B: Construct or Improve Bicycle Facility/Bicycle Boulevard	All Projects		
	T-20: Expand Bikeway Network	All Projects		
	T-26 Increase Transit Frequency	All Projects in PDAs	Increase the frequency of transit service by providing funding for more operators and vehicles	
	T-25 Increase Transit Coverage	All Projects	Expand transit service to areas without access to it, or expand to later/earlier hours.	
	T-23: Community-Based Travel Planning	Residential, Retail, School	*Proactive outreach to all households in service area or project *Program Coordinator designated as lead in promoting non-auto transportation	

Impact Statement	Mitigation Measure(s)			Residual Impact
	T-22: Bikeshare/Scootershare	All Projects in PDAs	Fund and implement program providing e- bikes or scooters available on demand. Ideally pursue a "dockless" system.	
	Free E-Bike Program	All Projects	Provide e-bikes free of charge to households pledging to reduce vehicle trips	
	Source: Handbook for Analyzing Greenhouse Gas Emissions Reductions, Assessing Climate Change Vulnerabilities, and Advancing Health and Equity (CAPCOA, December 2021).			
	implemented for individual pro	ojects facilitated b project design rev	uce VMT below CCTA thresholds shall be y the 2040 General Plan. VMT reduction iew and be reviewed and approved by the	
Impact TRA-3. Implementation of the 2040 General Plan would not substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts would be less than significant.	No mitigation is required.			Less than Significant
Impact TRA-4. Implementation of the 2040 General Plan would not have the potential to result in inadequate emergency access. This impact would be less than significant.	No mitigation is required.			Less than Significant
Utilities and Service Systems				
Impact UTL-1. Development under the 2040 General Plan would increase demand for water, wastewater, stormwater, and telecommunications services. While utility facilities and infrastructure development and relocation facilitated by the proposed plan would occur in developed areas of Pleasant Hill where such facilities exist, construction-related impacts would be significant and Unavoidable even with mitigation.	Mitigation Measures AQ-1, AQ apply.	-3, CR-1, CR-2, CR	-3, CR-4, GEO-1, NOI-1, and NOI-2 would	Significant and Unavoidable

Impact Statement	Mitigation Measure(s)	Residual Impact
Impact UTL-2. Development facilitated by the 2040 General Plan would increase demand for water supply. However, with adherence to the 2040 General Plan goals and policies, water supplies would be adequate to support future development. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact UTL-3. Development projected by the proposed plan would increase demand for wastewater treatment. However, the existing wastewater treatment plant has sufficient capacity for future development, and the 2040 General Plan contains policies to ensure treatment is adequate. Impacts would be less than significant.	No mitigation is required.	Less than Significant
Impact UTL-4. Development facilitated under the 2040 General Plan would increase the volume of solid waste generated in Pleasant Hill. However, existing infrastructure that serves the city, as well as policies within the 2040 General Plan, would ensure that the City has adequate capacity to accept the increase in solid waste and comply with federal, State, and local management reduction regulations. Impacts would be less than significant.	No mitigation is required.	Less than Significant

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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1 Introduction

This document is a programmatic Environmental Impact Report (EIR) that assesses the potential environmental impacts associated with implementation of an update to the Pleasant Hill General Plan, including eight respective City General Plan elements (collectively referred to in this EIR as the "2040 General Plan"). A programmatic EIR evaluates the effects of broad proposals or planning-level decisions such as the proposed plan with a level of detail sufficient to allow informed decisions among planning-level alternatives and to develop broad mitigation strategies.

This chapter discusses (1) the proposed plan and EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) the lead, responsible, and trustee agencies; and (5) the environmental review process required under the California Environmental Quality Act (CEQA). The 2040 General Plan (sometimes referred to in this EIR as the "proposed plan") are described in detail in Chapter 2, *Project Description*.

1.1 EIR Purpose, Type, and Authority

1.1.1 Regulatory Purpose

The 2040 General Plan requires the discretionary approval of the Pleasant Hill City Council; therefore, the proposed plan is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the CEQA Guidelines (California Code of Regulations, Title 14), the purpose of an EIR is to serve as an informational document that:

"...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

As such, the regulatory purpose of this EIR is to disclose the environmental impacts, including any significant effects, of the proposed plan, identify ways to avoid or reduce environmental impacts through planning design or environmental mitigation measures, consider feasible alternatives to the proposed plan, and integrate public participation and input into the overall planning process.

1.1.2 EIR Type

This EIR has been prepared as a programmatic EIR pursuant to Section 15168 of the *CEQA Guidelines*. A programmatic EIR is appropriate for planning documents or other long-term programs. As stated in the *CEQA Guidelines*:

"A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- 1) Geographically,
- 2) As logical parts in the chain of contemplated actions;
- 3) In connections with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or

Pleasant Hill 2040 General Plan

4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."

This EIR is programmatic in nature with a broad comprehensive evaluation to cover the actions taken under the longer-range plan. Some future development projects may require additional project-specific environmental review, given that this program EIR analysis is not parcel- or project-specific.

1.1.3 Legal Authority

This EIR is intended to serve as an informational document for the public and City of Pleasant Hill decision makers. The approval process will include public hearings before the Planning Commission and the City Council to consider certification of a Final EIR and adoption of the proposed plan. Adoption of the proposed plan may not be considered until this EIR has first been considered by the decision makers and certified by the approving body, in this case the Pleasant Hill City Council.

1.2 Environmental Impact Report Background

1.2.1 Notice of Preparation

The City of Pleasant Hill distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on July 7, 2022 and ending on August 8, 2022. In addition, the City held an EIR Scoping Meeting on July 26, 2022. The meeting was aimed at providing information about the proposed plan to members of public agencies, interested stakeholders, and residents/community members, and at receiving input on the scope of the environmental review. The meeting was held virtually via Zoom due to ongoing COVID-19 pandemic health and safety precautions.

1.2.2 Comments Received in Response to the NOP

In addition to one verbal comment received during the EIR Scoping Meeting, the City received written scoping comment letters from six agencies, two organizations, and 37 individuals in response to the NOP during the public review period. The NOP is included in Appendix A of this EIR, along with the written NOP responses that were received. Table 1-1 summarizes the content of the letters and verbal comments and where the issues raised are addressed in this EIR.

Table 1-1 NOP Comments and EIR Location Information

Commenter	Comment/Request	Where It Was Addressed
Agency Comments		
East Bay Municipal Utility District (EBMUD)	Water service for new multi-unit structures shall be individually metered in compliance with California State Senate Bill 7.	Comments relevant to CEQA are addressed in Section 3.13, <i>Utilities and Service Systems</i> .
	When development plans are finalized for individual projects within the General Plan area, project sponsors for individual projects should contact EBMUD to request a water service estimate for water service to developments.	

Commenter	Comment/Request	Where It Was Addressed
	Project sponsors must submit copies to EBMUD of all known information regarding soil and groundwater quality within or adjacent to the project boundary.	
	Individual projects within the General Plan presents an opportunity to incorporate water conservation measures. Requests that the City include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, Model Water Efficient Landscape Ordinance	
Native American Heritage Commission (NAHC)	States that the proposed project is subject to the requirements and provisions under Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) for tribal cultural resources.	Consultation required pursuant to SB 18 and AB 52 was carried out by the City of Pleasant Hill. Related topics relevant to CEQA are discussed in Section 3.4, Cultural and Tribal Cultural Resources, of this EIR.
Department of Toxic Substances Control (DTSC)	Recommends that the EIR address actions to be taken for sites impacted by hazardous waste or hazardous materials, not just those found on the Cortese List. A search of EnviroStor should be conducted.	Comments relevant to CEQA are addressed in Section 3.7, Hazards, Hazardous Materials, & Wildfire.
	The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous waste/substances	
	Aerially deposited lead contaminated soils may still exist along roadsides, medians, and some existing road surfaces. It's recommended that soil samples be collected for lead analysis prior to performing intrusive activities for projects described in the EIR.	
	Proper investigation for mine waste should be evaluated according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook.	Comments relevant to CEQA are addressed in Section 3.5, <i>Geology, Soils, & Mineral Resources</i> .
	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 the chemicals should be conducted in compliance with California environmental regulations and policies.	Comments relevant to CEQA are addressed in Section 3.7, Hazards, Hazardous Materials, & Wildfire.
	If projects under the proposed plans require the importations of soil to backfill any excavated areas, proper sampling shall be conducted to ensure the imported soil is free of contamination.	

Commenter	Comment/Request	Where It Was Addressed
	If any sites included as part of the proposed project have been used for agricultural, weed abatement, proper investigation for organochlorinated pesticides be discussed in the EIR and evaluated using DTSC's 2008 Interim Guidance for Sampling Agricultural Properties.	
California Department of Fish and Wildlife (CDFW)	A California Endangered Species Act Incidental Take Permit must be obtained if the project has the potential to result in take of plants of animals listed under CESA.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture & Forestry Resources</i> .
	For project-related activities potentially affecting rivers, lakes, or streams, and their associated riparian habitat, CDFW requires a Lake and Streambed Alteration Notification.	
	Migratory birds are protected under the federal Migratory Bird Treaty Act and CDFW has authority over actions that may disturb or destroy active nest sites or take birds.	
	The commenter requests a complete description in Section 2, Project Description, of the following: Footprints of permanent project features and temporarily impacts areas targeted for vegetation treatment or removal Land use changes that would reduce open space or agricultural land uses and increase residential or other land use involving increased development Area and plans for proposed structures, ground disturbing activities, fencing, paving, stationary machinery, landscaping, vegetation treatment for fuel reduction, floodwalls or levees, and stormwater systems Operational features of the project, including level of anticipated human presence, artificial lighting/light reflection, noise, traffic generation, and other features. Construction schedule, activities, equipment and crew sizes	Comments relevant to CEQA are addressed in Section 2, Project Description.

Commenter Comment/Request Where It Was Addressed

Recommends creating a procedure or checklist for evaluating subsequent project impacts on biological resources to determine if there are within the scope of the program EIR or if an additional environmental document is warranted. The checklist should be included as an attachment to the draft EIR.

Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture & Forestry Resources.

Recommends the EIR provide baseline habitat assessments for special status plant, fish, and wildlife species located and potentially located within the project area and surrounding lands, including but not limited to all rare, threatened, or endangered species.

CDFW is concerned regarding potential impacts to special-status species that may be present in the project area, including, but not limited to:

Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture & Forestry Resources.

- Alameda whipsnake
- California tiger salamander
- California red-legged frog
- Foothill yellow-legged frog
- Giant garter snake
- San Joaquin kit fox
- Pallid bat
- Townsend's big-eared bat
- Suisun song sparrow
- California least tern
- California black rail
- California Ridgeway's rail
- Western burrowing owl
- Antioch Dunes evening-primrose
- Bay checkerspot butterfly
- Lange's metalmark butterfly
- Longhorn fairy shrimp
- Alkali milkvetch
- Big tarplant
- Contra Costa goldfields
- Contra Costa wallflower
- Fragrant fritillary
- Large-flowered fiddleneck
- Mason's lilaeopsis
- Mt. Diablo's bird beak
- Mt. Diablo fairy-lantern
- Rock ranicle
- Soft bird's beak

Requests that any special-status species and natural communities detected during project surveys be reported to the CNDDB.

Commenter	Comment/Request	Where It Was Addressed
Contra Costa County Flood Control and Water Conservation District (FC District)	Requests a map of watersheds, existing watercourses, tributaries, and man-made drainage facilities, and the FC District's right of way, within the General Plan area, especially where land use designation changes would be located be included in the EIR.	Comments relevant to CEQA are addressed in Section 3.8, Hydrology and Water Quality
	Requests that the EIR discuss proposed changes in density from the City's current General Plan, and its corresponding increases in impervious surface, its effect on the existing storm drain system, and mitigation. Downstream impacts to downstream facilities due to higher volume of runoff should also be discussed	
	Future development should design and construct storm drain facilities to adequately collect and convey stormwater runoff, without diversion of the watershed, entering or originating within the development to the nearest natural watercourse or adequate manmade drainage facility.	_
	The adequacy and stability of the drainage facilities within the GPU area be studied to determine if local drainage design criteria are met, as well as FEMA National Floodplain Insurance requirements.	_
	The City is within the Grayson Creek/Murderers Creek Watershed. The EIR should evaluate direct impacts to creeks, their tributaries, and downstream receiving waters resulting from future development	-
	The EIR should discuss the payment of drainage area fees for development within formed drainage areas as a mitigation measure. The FC District charges drainage area fees for new impervious surfaces created within Drainage Areas 16, 44B, 46,47, 62, 72, 78, 89.	Comments relevant to CEQA are addressed in Section 3.13, <i>Utilities and Service Systems</i> .
	Recommends the EIR request the appropriate environmental regulatory agencies such as the U.S. Army Corps of Engineers, the State Department of Fish and Wildlife, and the State Regional Water Quality Control Board, to explore the permits, special conditions, and mitigation that may be necessary for the project.	Comments relevant to CEQA are addressed in Section 3.8, <i>Hydrology and Water Quality</i> .

Commenter	Comment/Request	Where It Was Addressed
	The EIR should discuss how the General Plan Update will comply with the current National Pollutant Discharge Elimination System requirements under the City's Stormwater Management and Discharge Control Ordinances and the C.3 Guidebook	
	The FC District shall be included in the review of all drainage facilities that have a region-wide benefit, that impact region-wide facilities, or that impact FC District-owned facilities.	
California Department of Transportation (Caltrans)	Requests that the City of Pleasant Hill General Plan Update is consistent with the California Government Code Section 65088-65089 Congestion Management	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i> .
	The City is requested to gain a determination of conformity from the Contra Costa Transportation Authority to determine that the City of Pleasant Hill General Plan Update is consistent with and conforms to the Regional Transportation Plan Consistency Requirements of the County's Congestion Management Plan	
	Encourages a sufficient allocation of fair share contributors toward multi-modal and regional transit improvements to fully mitigate cumulative impacts to regional transportation	
	If Caltrans facilities are impacted by the project, the facilities must meet American Disabilities Act Standards after project completion.	
Organization Comment	s Rec	
Vanhole Realty	The commenter provides thoughts and suggestions regarding the Mangini/Delu project site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.
Vanhole Realty	The commenter provides thoughts and suggestions regarding alternatives for the Mangini/Delu project site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.
Individual Comments		
Norm Scheel	Requests a revised or final Summary of Proposed Housing sites available	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.

Commenter	Comment/Request	Where It Was Addressed	
Bushra Toma	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Judy Geringer	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Sean Grech	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	

Commenter	Comment/Request	Where It Was Addressed
Pamela Reid	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation.</i>
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.
Eileen Mascaro	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation.</i>
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.
Pete Sabine	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.

Commenter	Comment/Request	Where It Was Addressed	
Shereen Motarjemi	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> , and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Catherine Boccellari	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
John Walter	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	

Commenter	Comment/Request	Where It Was Addressed	
Nick Gianoko	Requests that the other end of Malaga Way into the Mangini property remain closed.	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
David Blau	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Lesley Stiles	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Jim and Sally Whitsett	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	

Commenter	Comment/Request	Where It Was Addressed	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
John and Lisa Hutchinson	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i> .	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Debbie Cotton	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Karen Lee	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	

Commenter	Comment/Request	Where It Was Addressed	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Alice and Jeff Smith	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological</i> , <i>Agriculture</i> , & <i>Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
	Suggests high density housing belongs near public transit and major highways designed to handle the impact of large scale development	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Amy Arcus-Arth	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Bruce Irion	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	

Commenter	Comment/Request	Where It Was Addressed	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Darren Hall	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
David Blau	The Notice of Preparation did not provide a description of the proposed action or alternatives.	Comments relevant to CEQA are addressed in Section 2, <i>Project Description,</i> and in Section 5, <i>Alternatives</i> .	
	There was not a Scoping Report prepared for the project	A Scoping Report is not required pursuant to 2022 CEQA Guidelines	
	The NOP does not provide a "reasonable range of alternatives"	Comments relevant to CEQA are addressed in Section 5, Alternatives.	
	Requests a full analysis of the No Project Alternative	Comments relevant to CEQA are addressed in Section 5, <i>Alternatives</i> .	
	Requests a detailed analysis of traffic and greenhouse gas impacts along with proposed mitigation	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhous Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests a Level of Service analysis and VMT for each proposed housing site.	Pursuant to SB 743 and 2022 CEQA Guidelines, a Level of Service analysis is no longer required.	
	Requests the identification and analysis of the Environmentally Superior Alternative	Comments relevant to CEQA are addressed in Section 5, <i>Alternatives</i> .	
Marian Crompton	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	

Commenter	Comment/Request	Where It Was Addressed	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Martin Gibb	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, Biological, Agriculture, & Forestry Resources.	
	Requests a Master Plan for the Mangini/Delu site	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
Karen Panico	Concerned that the addition of housing would have a significant impact on water resources	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> , and in Section 3.12, <i>Transportation</i> .	
	Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>	
	Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .	
	Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	This comment is on the proposed plan rather than the environmental scope so requires no further response but will be considered by the City decision-makers as part of the plan adoption process.	
	Requests a Master Plan for the Mangini/Delu site	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy</i> , and in Section 3.12, <i>Transportation</i> .	
Alan Bade	Requests that the Contra Costa Flood Control Agency's "50 Year Plan" be incorporated into the new General Plan regarding flood control.	Comments relevant to CEQA are addressed in Section 3.8, <i>Hydrology and Water Quality</i> .	
Cindy Rubin	Concerned with water supply for new and existing homes in the area	Comments relevant to CEQA are addressed in Section 3.13, <i>Utilities and Service Systems</i>	
	Concerned with traffic in the area	Comments relevant to CEQA are addressed in	

Concerned with the loss of open space	Comments relevant to CEQA are addressed in
	Section 3.11, Public Services and Recreation
Concerned that the addition of housing would have a significant impact on traffic and greenhouse gases in the city.	Comments relevant to CEQA are addressed in Section 3.6, <i>Greenhouse Gas Emissions & Energy,</i> and in Section 3.12, <i>Transportation</i> .
Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future.	Comments relevant to CEQA are addressed in Section 3.12, <i>Transportation</i>
Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors.	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .
Requests a Master Plan for the Mangini/Delu site	This comment is on the project rather than the environmental scope so requires no further response but will be considered by the City's decision makers as part of the plan adoption process.
ents	
Comment Request	Where it Was Addressed
Commenters are concerned with habitat and wildlife preservation in unexpected places	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .
Commenters are concerned with the preservation of creek habitats	Comments relevant to CEQA are addressed in Section 3.3, <i>Biological, Agriculture, & Forestry Resources</i> .
Creek restoration and the inclusion of Contra Costa Flood Control Agency's "50 Year Plan"	Comments relevant to CEQA are addressed in Section 3.8, <i>Hydrology and Water Quality</i> .
Requests the EIR consider potential impacts to parks and open space	Comments relevant to CEQA are addressed in Section 3.11, Public Services and Recreation
Commenters are concerned with the impacts of transportation and greenhouse	Comments relevant to CEQA are addressed in Section 3.6, Greenhouse Gas Emissions & Energy,
	would have a significant impact on traffic and greenhouse gases in the city. Requests that a baseline traffic survey be included for all major streets and intersections and require new development to avoid or mitigate significant deterioration in the future. Requests that the City preserve open space and biologically sensitive habitats, particularly creek corridors. Requests a Master Plan for the Mangini/Delu site ents Commenters are concerned with habitat and wildlife preservation in unexpected places Commenters are concerned with the preservation of creek habitats Creek restoration and the inclusion of Contra Costa Flood Control Agency's "50 Year Plan" Requests the EIR consider potential impacts to parks and open space Commenters are concerned with the

1.3 Scope and Adequacy

1.3.1 Scope and Sources

This EIR addresses impacts related to all topics listed in 2022 CEQA Guidelines Appendix G.

The alternatives chapter of this EIR (Chapter 5.0) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives chapter identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and three alternative development scenarios for the General Plan area.

In preparing this EIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. References are included as footnote citation references where relevant throughout this EIR document.

1.3.2 Content Adequacy

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *Guidelines* state:

"An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure."

1.4 Lead, Responsible, and Trustee Agencies

1.4.1 Lead Agency

The CEQA Guidelines define lead, responsible and trustee agencies. The City of Pleasant Hill is the lead agency for the proposed plan, because it holds principal responsibility for approving the proposed plan.

1.4.2 Responsible Agencies

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over a project or plan. The California Department of Fish and Wildlife (CDFW) is a responsible agency under CEQA for the proposed plan.

1.4.3 Trustee Agencies

A trustee agency refers to a State agency having jurisdiction by law over natural resources affected by a project or plan. The CDFW is a trustee agency for the proposed plan.

1.5 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

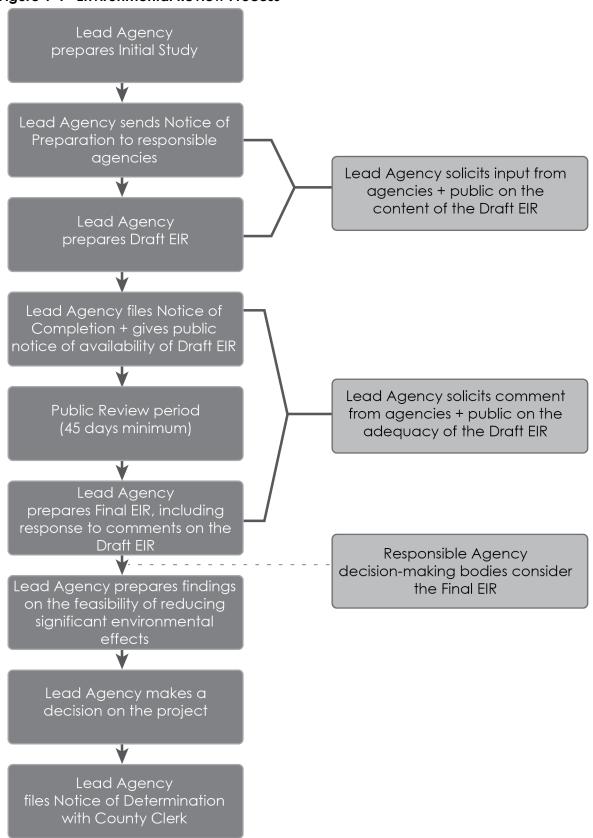
 Notice of Preparation (NOP). After deciding that an EIR is required, the lead agency (City of Pleasant Hill) filed a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (CEQA Guidelines Section 15082; Public Resources Code Section 21092.2). The NOP for this EIR was posted in the Contra Costa County Clerk's office for 30 days. In addition, the City of Pleasant Hill held an EIR Scoping Meeting on July 26, 2022.

Pleasant Hill 2040 General Plan

- 2. Draft EIR. This Draft EIR contains the following required components: a) table of contents or index; b) summary; c) project description; d) environmental setting as part of the various topical sections; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing, and unavoidable impacts) as part of the various topical sections; f) a discussion of alternatives; g) mitigation measures as part of the various topical sections; and h) discussion of irreversible change (CEQA Guidelines Sections 15120 through 15132).
- 3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site (not appropriate for citywide or plan-level efforts such as the proposed plan); and c) direct mailing to owners and occupants of contiguous properties (not appropriate for citywide or plan-level efforts such as the proposed plan). The lead agency must solicit input from other agencies and the public and respond in writing to all comments received (*Public Resources Code* Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (*Public Resources Code* Section 21091). Given such requirements, this Draft EIR will be noticed via publication in a newspaper of general circulation and involve a 45-day public review and comment period.
- 4. **Final EIR.** A Final EIR must include the following components: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments (*CEQA Guidelines* Section 15132).
- 5. **Final EIR Certification.** Prior to making a decision on the proposed plan, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency (i.e., Pleasant Hill City Council); and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving the proposed plan (*CEQA Guidelines* Section 15090).
- 6. Lead Agency Plans Decision. The lead agency may a) disapprove the proposed plan because of its significant environmental effects; b) require changes to the proposed plan to reduce or avoid significant environmental effects; or c) approve the proposed plan despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (CEQA Guidelines Sections 15042 and 15043).
- 7. **Findings/Statement of Overriding Considerations**. For each significant impact of the proposed plan identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the proposed plan has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the proposed plan are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or proposed plan alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a plan or project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.

- 8. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects (*CEQA Guidelines* Section 15097).
- 9. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a plan or project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (*Public Resources Code* Section 21167[c]).

Figure 1-1 Environmental Review Process



2 Project Description

As part of an overarching planning process, the City of Pleasant Hill (City) proposes to adopt an update to the City General Plan, including eight respective City General Plan elements (collectively referred to in this EIR as the 2040 General Plan). The 2040 General Plan elements include: Land Use; Housing; Transportation and Circulation; Hazards and Safety; Environment; Open Space, Parks, and Recreation; Public Facilities, Services, and Infrastructure; and Economics and Economy.

The 2040 General Plan serves as the long-term blueprint for development across the City Sphere of Influence (the General Plan area). This chapter provides an overview of the plan area location and setting as well as the proposed plan's objectives, land use components, and policies. Intended uses of this EIR by agencies with permitting and approval authority over the proposed plan, in addition to required permits and approvals, are also discussed.

2.1 Plan Area Location and Setting

2.1.1 Regional Location

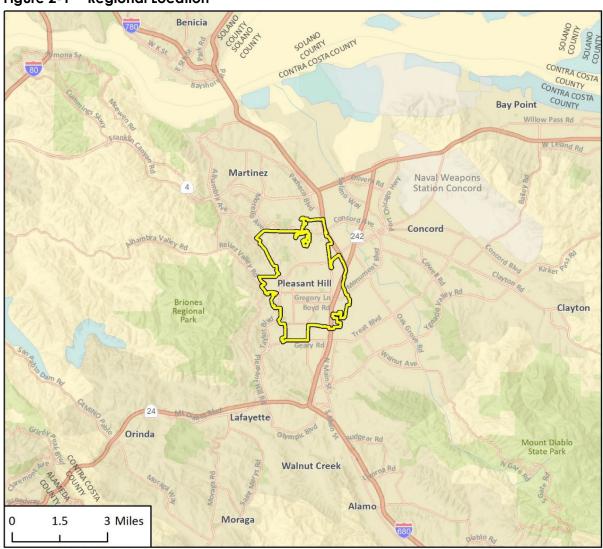
The City of Pleasant Hill is located in Contra Costa County within the San Francisco Bay Area (see Figure 2-1), and the General Plan area involves all land within the Pleasant Hill Sphere of Influence (see Figure 2-2). Pleasant Hill is bound by the communities of Pacheco and Martinez to the north, Concord to the east, and Walnut Creek to the south. The Briones Hills are located to the west of Pleasant Hill, forming a natural barrier to development between the San Francisco Bay and inland East Bay valleys. Pleasant Hill is approximately 15 miles northeast of the City of Oakland, 20 miles northeast of San Francisco, and 40 miles north of San Jose. Principal regional transportation facilities serving Pleasant Hill are Interstate 680 (I-680), State Route 242, Bay Area Rapid Transit (BART), and the Oakland International Airport. Regional bus service is also provided by County Connection.

2.1.2 Local Setting

Pleasant Hill is characterized as a suburban residential community. Approximately 62 percent of land within Pleasant Hill is occupied with residential uses, primarily single-family. Office and institutional uses, which include care facilities, churches, schools, shelters and government-owned property, occupy 18 percent of Pleasant Hill land, and commercial areas occupy 7 percent. Recreation and open space account for 8 percent of Pleasant Hill land, industrial uses comprise 2 percent, and 3 percent of land in the City is vacant. Pleasant Hill falls within the Grayson-Murderers sub-watershed, which is 11,021 acres in size and also includes the western portion of Walnut Creek and the eastern portion of Briones Regional Park. The local climate in Pleasant Hill is characterized by cool, wet winters and hot, dry summers.

¹ The area covered by the 2040 General Plan consists of the corporate limits of the City as well as lands within the City's Sphere of Influence (SOI). The term "sphere of influence" applies to the area designated by Contra Costa County Local Agency Formation Commission (LAFCO) as the probable, future physical boundary or service area of the City. Overall, planning decisions made for the City are assumed to have a bearing on growth and development in these unincorporated adjacent areas; however, the City does not propose to annex any of this area as part of this General Plan. Instead, the General Plan will continue the City's longtime policy of deferring to the County land use designations and regulations in the SOI. Any development or change that happens in the SOI during the lifetime of the General Plan will occur under the jurisdiction of County. Therefore, this EIR does not evaluate impacts resulting from future growth within the SOI as part of the proposed plan. However, where relevant, this EIR does evaluate potential impacts resulting from future growth within the City limit to lands within the SOI. The SOI is also included in the cumulative setting for this EIR.

Figure 2-1 Regional Location



Imagery provided by Esri and its licensors © 2022. Walnut Creek quadrangle and TO1N RO2W SO2-05,08-11,14-16 & TO2N RO2W S27,32-35.



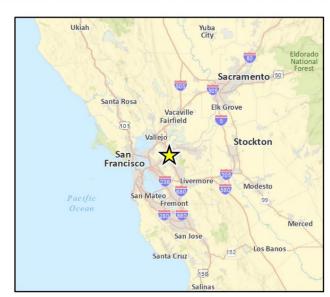
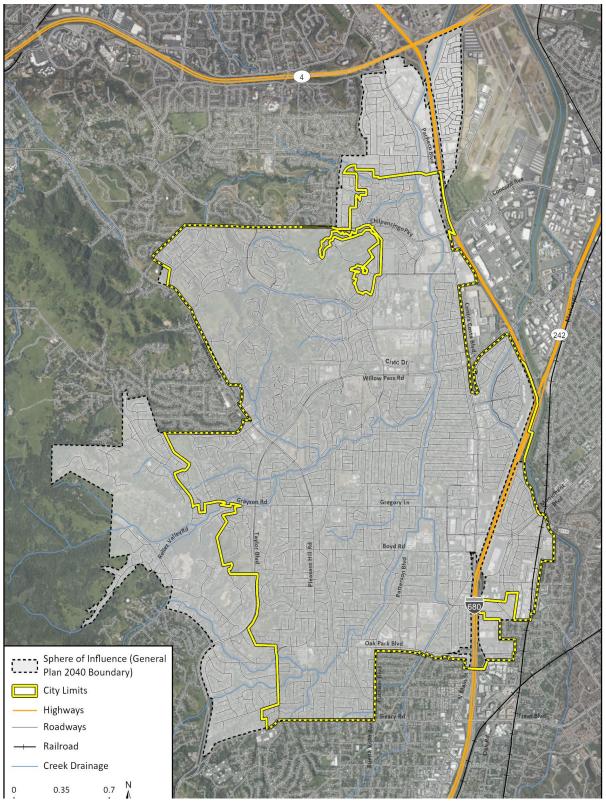


Figure 2-2 Plan Area Location



2.2 Existing Plan Area Characteristics

The 2040 Pleasant Hill General Plan area covers the 7.10 square miles (or 4,544 acres) of land within Pleasant Hill City limits. Approximately 34,231 people live within the General Plan area as of 2019, representing a density of about 4,821 people per square mile. In addition, 14,340 housing units exist within the General Plan area as of 2019.²

2.3 Existing Land Use Designations

The current Pleasant Hill General Plan Land Use Element establishes 18 separate land use designations to provide a mixture of land uses for the City. The existing City of Pleasant Hill Land Use Designations Map is shown in Figure 2-3.

2.4 Plan Objectives

The City's General Plan objectives are as follows:

- Encourage smart and sensitive development. Protect and enhance the community character and existing neighborhoods that define Pleasant Hill by guiding future residential and commercial development to meet the needs of the community and be respectful of the environment;
- Foster economic diversity and sustainability. Promote a diverse local economy that is flexible and adaptable to changes in consumer habits and market trends. Be a business-friendly community that supports businesses that foster new job growth and attracts visitors to the city;
- Provide barrier-free mobility. Advance and maintain a circulation network that accommodates alternative modes of travel, provides neighborhood connectivity, and enhances safety;
- Provide balanced growth. Focus new development in areas adjacent to major corridors and transit systems while preserving existing neighborhoods and open space resources. Support sustainable development that aligns with current best practices and is compatible with our community;
- Ensure public safety. Providing a safe community through public safety services, resilient
 infrastructure, public awareness, preparedness, and action plans for both human-caused and
 natural disasters; and
- Support diverse housing options. Create the conditions necessary to stimulate the diversity of housing options for community members of all ages and incomes.

² California Department of Finance (DOF). 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2021, with 2010 Benchmark. Available: https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/. Accessed September 2022

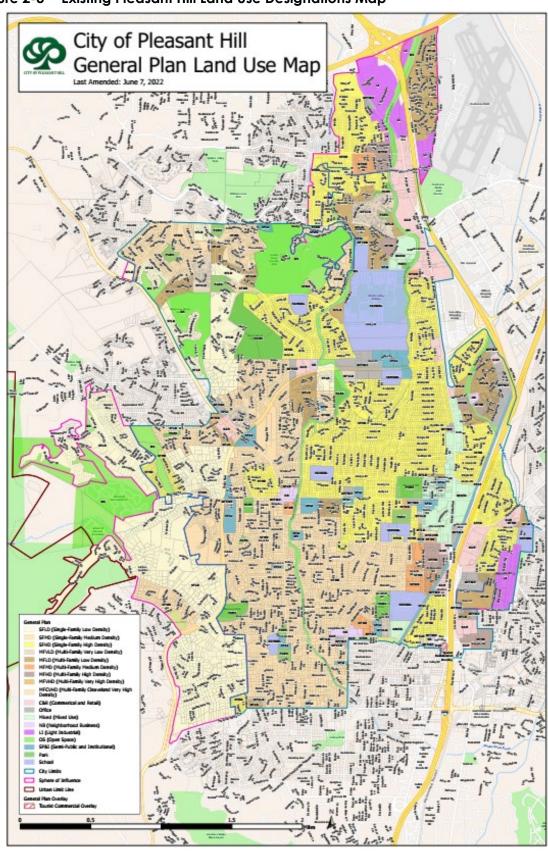


Figure 2-3 Existing Pleasant Hill Land Use Designations Map

2.5 Proposed Plan Components

Proposed General Plan Land Use Allowance

Table 2-1 shows the overall land use components summary for the 2040 General Plan and is followed by a more-detailed description of the proposed plan. For conservative and reasonable analysis purposes, the City has decided to assume maximum 2040 General Plan buildout (of both residential and non-residential uses) by 2040 within Pleasant Hill. While not likely to occur, maximum buildout represents development of every land parcel within Pleasant Hill in accordance with the proposed land use designation included in the proposed 2040 General Plan. Pleasant Hill, and the 2040 General Plan boundary, for purposes of this EIR is considered all land within City limits.

Table 2-1 also indicates the net change from Pleasant Hill existing conditions (in 2022) to proposed full buildout of the 2040 General Plan by 2040; this EIR analyzes the net change in terms of potential physical environmental impacts.

Table 2-1 Existing and Proposed Plan Land Uses Components Summary

	Existing (2022)	Proposed (2040)	Net Change from Existing to Proposed
Residential Units	14,340	33,556	19,216
Non-residential gsf	8,004,317	17,160,530 ³	9,156,213

The 2040 General Plan would provide the framework for development of up to 19,216 net new⁴ primary and accessory dwelling residential units, with the following composition:

- 7,150 single-family primary units (including 525 accessory dwelling units [ADUs])
- 12,066 multi-family primary units

The 2040 General Plan would provide the framework for development of up to 9,156,213 net new non-residential gross square feet (gsf), with the following composition:

- 1,358,792 gsf of commercial, neighborhood business, and mixed uses
- (217,081) gsf of office uses
- 168,672 of industrial uses
- 6,444,767 gsf of school uses
- 1,401,063 gsf of semi-public and institutional uses

Density ranges would be between 1.3 and 100 dwelling units per acre.

With relatively limited opportunities for new development in Pleasant Hill, the 2040 General Plan emphasizes infill and reuse development within the City limits, encourages higher-density and mixed-use projects where appropriate, and supports development that compliments the existing natural and built environment. Future development would occur where existing roads, water, and sewer are in place and in a manner that minimizes the impact of development on existing infrastructure and services.

³ Proposed non-residential gsf consists of 3,408,420 gsf of retail, 2 4,167,310 gsf of service, 181,600 gsf of manufacturing, and 9,403,200 gsf of other uses.

⁴ Net new means the change from City of Pleasant Hill existing (2019) development to full buildout of the proposed plan (i.e., 2040 General Plan) by 2040; this EIR analyzes the net change in terms of potential physical environmental impacts.

Specific land use designations are currently proposed for the 2040 General Plan area. These specific map amendments are to ensure consistency with existing land uses, such as public utilities, recreational facilities, and parks. These amendments will not substantially change the development potential for these properties. Rather, the 2040 General Plan serves as the City's long-term development blueprint through 2040, contains goals and policies guiding land use and infrastructure decisions through 2040, and brings the General Plan up to date in response to latest State and regional plans and regulations related to housing, ⁵ climate-related hazards, ⁶ emergency evacuation routes and access, water supply, and mobility. As such, the updated policies of the proposed 2040 General Plan are the focus of the 2040 General Plan description below, and the development opportunities under the umbrella of the 2040 General Plan are discussed in detail under the proposed Land Use Element and Housing Element descriptions.

Proposed General Plan Elements Aspects

Land Use Element

The Land Use Element contains the Land Use Map as well as the policies and standards that directly shape land use decisions and the resulting physical development of Pleasant Hill. The Land Use Element includes goals, policies, and programs that guide land development in Pleasant Hill. The Element addresses the type and intensity of development allowed on a site, the mix of uses permitted within Pleasant Hill, and the character of the community. The Land Use Element also determines the general location of residential, commercial, industrial, public, and open space uses. This Element balances land use issues, opportunities, and constraints with the community's other needs and desires.

PROPOSED LAND USE DESIGNATIONS

The Land Use Element establishes 23 separate land use designations to provide a mixture of land uses for the City. The specific proposed land use designations in the Land Use Element are shown in Table 2-2. Figure 2-4 shows the proposed City of Pleasant Hill Land Use Designations Map.

Table 2-2 Description of Proposed Pleasant Hill Land Use Designations

•	•	•	
Land Use Designation	Description	Residential Density	Intensity (Floor Area Ratio)
Residential			
Single-Family Low Density	The Single-Family Low-Density designation is intended for the development of dwelling units on larger parcels ranging from 15,000-20,000 sq. ft. This designation also permits the development of accessory dwelling units (ADUs). Per State law ADUs are not counted toward the allowable density.	1.3-3.0 units/acre	n/a
Single-Family Medium Density	The Single-Family Medium-Density designation is intended for the development dwelling units on parcels ranging from 7,000-10,000 sq. ft. This designation also permits the development of accessory dwelling units (ADUs).	3.1-4.5 units/acre	n/a

⁵ The City will update the Pleasant Hill Housing Element as part of the 6th Cycle Regional Housing Needs Allocation (RHNA) and to comply with California Government Code Sections 65580 to 65589.11.

⁶ Pursuant to SB 379, which amended California Government Code Section 65302.

Land Use Designation	Description	Residential Density	Intensity (Floor Area Ratio)
Single-Family High Density	The Single-Family High-Density designation is intended for the development of dwelling units on parcels as small as 6,000 sq. ft. This designation also permits the development of accessory dwelling units (ADUs).	4.6-6.0 units/acre	n/a
Mangini-Delu-Winslow Residential	The Mangini-Delu-Winslow Residential designation identifies the Mangini-Delu-Winslow parcels located at Taylor Boulevard and Pleasant Hill Road, which are suitable for a variety of housing types. This designation also permits the development of accessory dwelling units (ADUs).	4.6-13.0 units/acre	n/a
Multi-Family Very Low Density	The Multi-Family Very Low-Density designation identifies areas suitable for the development of duplexes, triplexes, fourplexes, townhouses, and very-small-lot, single-family dwelling units. This designation also permits the development of accessory dwelling units (ADUs).	7.0-12.0 units/acre	n/a
Multi-Family Low Density	The Multi-Family Low-Density designation identifies areas suitable for the development of duplexes, triplexes, fourplexes, townhouses, detached and attached single-family dwelling units, and mobile homes. This designation also permits the development of accessory dwelling units (ADUs).	12.1-20.0 units/acre	n/a
Multi-Family Medium Density	The Multi-Family Medium-Density designation identifies areas suitable for the development of duplexes, triplexes, fourplexes, townhouses, mobile homes, and condominiums. This designation also permits the development of accessory dwelling units (ADUs).	20.1-30.0 units/acre	n/a
Multi-Family High Density	The Multi-Family High-Density designation identifies areas suitable for the development of townhouses, studio flats, condominiums, and apartments. This designation also permits the development of accessory dwelling units (ADUs).	30.1-40.0 units/acre	n/a
Multi-Family Very High Density	The Multi-Family Very High-Density designation identifies areas suitable for the development of studio flats, condominiums, and apartments. This designation also permits the development of accessory dwelling units (ADUs).	40.1-73.0 units/acre	n/a
Cleaveland Multi-family Very High Density	The Cleveland Multi-family Very High-Density designation allows multi-family residential uses (i.e., apartments and condominiums) and applies only to the approximately 2.3-acre area covered by the Downtown Cleaveland Specific Plan.	40.1-93.0 units/acre	0.4-0.85
Mixed Use			
Mixed-Use Neighborhood	The Mixed-Use Neighborhood designation identifies areas suitable for the development of small-scale neighborhood centers where area residents can gather to socialize or shop. This designation allows for diverse uses, including residential, commercial, office, employment, and	1.3-20.0 units/acre	0.75 (max)

Land Use Designation	Description personal services, located within the same building (vertical mixed-use) or on the same site (horizontal mixed-use). The intensity of development in the Mixed-Use Neighborhood designation is lower than that in the other mixed-use designations to maintain compatibility with adjacent lower-density single-family neighborhoods.	Residential Density	Intensity (Floor Area Ratio)
Mixed-Use	The Mixed-Use designation combines residential with retail, commercial, office and/or public uses with flexible parking and setback requirements. This designation allows for diverse uses, including residential, commercial, office, entertainment, and personal services, located within the same building (vertical mixed-use) or on the same site (horizontal mixed-use). Residential types allowed in this designation include live work units, townhouses, apartments, studio flats, and condominiums.	12.0-40.0 units/acre	0.4-0.75
Mixed-Use High-Density	The Mixed-Use High-Density designation combines more intense residential types with retail, commercial, office and/or public uses with flexible parking and setback requirements. This designation allows for diverse uses, including residential, commercial, office, entertainment, and personal services, located within the same building (vertical mixed—use) or on the same site (horizontal mixed-use). Residential types allowed in this designation include live-work units, townhouses, apartments, studio flats, and condominiums.	40.1-70.0 units/acre	0.4-0.75
Mixed-Use Very High- Density	The Mixed-Use Very High-Density designation combines residential with retail, commercial, office and/or public uses with flexible parking and setback requirements. This designation allows for the most intensive uses, including high-density residential, commercial, hotels, office, entertainment, and personal services, located within the same building (vertical mixed-use) or on the same site (horizontal mixed-use). The intent is to shape active street frontages within this designation that create unique social activity community spaces. Residential types allowed in this designation include live-work units, townhouses, apartments, studio flats, and condominiums.	70.1-100.0 units/acre	0.4-0.85
Commercial			
Commercial and Retail	The Commercial and Retail designation includes shopping centers, banks, hotels, personal services (such as barber shops and dry cleaners), entertainment and cultural venues, restaurants, auto sales and service, and ancillary offices	n/a	0.4 (max)

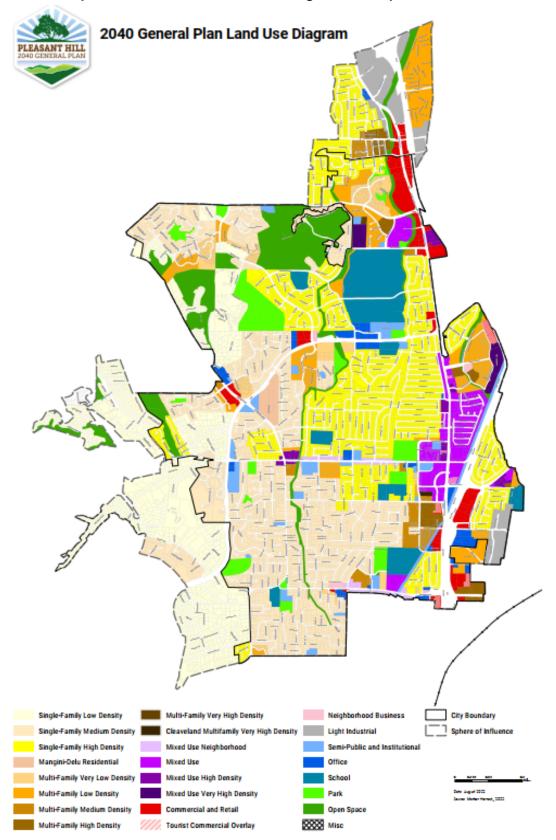
Land Use Designation	Description	Residential Density	Intensity (Floor Area Ratio)
Neighborhood Business	Business The Neighborhood Business designation includes small-format retail focusing on neighborhood-serving uses including, but not limited to, banks, personal services (such as barbershops and dry cleaners), restaurants, and ancillary offices.		0.35 (max)
Tourist Commercial	urist Commercial Tourist Commercial provides for commercial retail n/a 1.0 and service uses oriented toward tourists and other visitors to the community. The designation includes hotels. motels and related facilities. and visitor-serving businesses. Project development shall have a Floor-Area Ratio maximum of 1.00.		1.00 (max)
Industrial			
Light Industrial	The Light Industrial designation includes areas n/a 0.35 (max) suitable for light manufacturing, assembly uses, research and development, and flex industrial space with limited or very low nuisance characteristics. This designation allows for office, retail, and other service uses that serve the employees in the area. Uses that are ancillary to the primary use of a property, such as product display and/or sampling areas, facility tours, and promotional events, are also permissible.		0.35 (max)
Resource and Public Instit	tutional		
Semi-Public and Institutional	The Semi-Public and Institutional designation includes utility facilities and easements, libraries, City offices, fire stations, churches, and hospitals.	n/a	0.4 (max)
Office	The Office designation includes business, medical n/a 0.4 (max) and professional uses, office buildings and office parks with ancillary commercial and retail uses		0.4 (max)
School The School designation includes properties n/a 0.75 (dedicated to educational facilities including public and private schools, as well as higher education facilities.		0.75 (max)	
Park	The Park designation designates existing and n/a n/a proposed parkland, both developed and undeveloped. Typically, these areas are characterized by a high degree of open area, and a limited number of structures.		n/a
Open Space	The Open Space designation is essentially unimproved land devoted to preservation of natural resources and outdoor recreation.	n/a	n/a

PROPOSED NON-RESIDENTIAL SITES AND DEVELOPMENT FOCUS AREAS

The 2040 General Plan proposes changes to non-residential land uses on currently underutilized sites (e.g., surface parking lots or vacant land). New land uses would include commercial, office, retail (all allowed under residential mixed-use designations). New non-residential land uses would be located throughout the City, including along Contra Costa Boulevard, along Gregory Lane, around Diablo Valley College, the intersection of Pleasant Hill Road and Taylor Boulevard, Hookston Road, Taylor Boulevard, and Oak Park Boulevard.

The 2040 General Plan proposes to include policies specific to 10 focus areas within Pleasant Hill. Focus areas include Diablo Valley College, Mangini-Delu, Downtown Pleasant Hill, Hookston Industrial Area, Contra Costa Boulevard, Gregory Lane, Taylor Boulevard, Oak Park Boulevard, Monument Boulevard, and Ellinwood Way. Each of these focus areas have unique characteristics that would require specific policies to address. A map of the focus areas is shown in Figure 2-5.

Figure 2-4 Proposed Pleasant Hill Land Use Designations Map



1. Diablo Valley College 2. Mangini-Delu-Winslow 3. Downtown Pleasant Hill 4. Hookston Industrial 5. Contra Costa Boulevard 6. Gregory Lane 7. Taylor Boulevard 8. Oak Park Boulevard 9. Monument Boulevard 10. Ellinwood Way 1 TAYLOR BLVD 7 (5) GRAYSON RD GRAYSON RD GREGORY LN 6 3 BOYD RD OAK PARK BLVD 8 OAK PARK BLVD ,, ภาคคน, รอบ eye, Edrinsiar Geographics, ONES/Airbus USGS, AeroGRID, IGN, and the GIS User Community Map Contributors

Figure 2-5 Development Focus Areas within Pleasant Hill

PROPOSED LAND USE ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Land Use Element are shown in Table 2-3.

Table 2-3 Pleasant Hill Land Use Element Goals, Policies, and Programs

Table 2-3	riedsanii niii Land Use Elemeni Godis, Folicies, and Frograms	
ID#	Goals and Supportive Policies/Programs	
Goal LU-1	Promote a city image that reflects the community's diversity, inclusivity, forward-thinking, and high quality of life.	
Policy LU-1.1	City Atmosphere. Enhance the quality of life and civic pride through a diverse range of development types that create a memorable place to live, play, and work.	
Policy LU-1.2	City Image. Continue efforts to define and enhance the City's image by emphasizing the high quality, intergenerational park facilities and recreational opportunities in the city; dedication to education, including the presence of Diablo Valley College and its potential to provide cultural and lifelong learning opportunities; and the vital, progressive nature of the city as a diverse residential community and a supportive environment for business.	
Policy LU-1.3	Well-Defined Street Fronts. Require new buildings to maintain a street front that creates or maintains a well-defined streetscape.	
Policy LU-1.4	Gateway Features. Enhance key intersections and entries to the city with signs, landscaping, and streetscape features.	
Policy LU-1.5	Public Amenities/Art. Require installation of public art, landscaping, and/or other public amenities in conjunction with all new public and private development and major rehabilitation or expansion of existing development.	
Policy LU-1.6	Transition in Scale. Require that new development transition appropriately in building scale, height and massing in relation to the physical and visual character of adjoining neighborhoods.	
Policy LU-1.7	Multi-Story Development. Require multi-story buildings to incorporate step backs on upper floors to create a more human-scale and comfortable pedestrian environment.	
Policy LU-1.8	Citywide Beautification. Promote a clean and attractive city through periodic clean-up and beautification of commercial areas and neighborhoods.	
Policy LU-1.9	Connectivity Between Existing and New Development. Encourage linking new development to existing development, parks, and trails through the creation of internal circulation systems that allow travel by foot, bicycles, vehicles, and other alternative modes of travel.	
Goal LU-2	Promote scenic routes and corridors in the city that add to the overall character of the City.	
Policy LU-2.1	Scenic Route Setbacks. Enforce setbacks from the right-of-way for scenic routes, in which only landscaping and pedestrian and bicycle routes may be allowed.	
Policy LU-2.2	Scenic Route Improvements. Coordinate with the County in planning for scenic route improvements.	
Goal LU-3	To provide a variety of housing types that offer choices for Pleasant Hill residents and create complete, livable neighborhoods.	
Policy LU-3.1	Neighborhood Character. Maintain and enhance the character and quality of existing residential neighborhoods, ensuring adequate public services and facilities maintained by the City such as streets and drainage are provided.	
Policy LU-3.2	Connectivity. Encourage new residential and mixed-use development to incorporate design features that promote walking within neighborhoods and citywide.	
Policy LU-3.3	Neighborhood Access. Ensure that new residential development includes safe and convenient pedestrian and bicycle access to existing residential neighborhoods.	
Policy LU-3.4	Clustering Development. Encourage new residential development to be clustered to support increased densities, open space, and efficiencies of public facilities and services.	

ID#	Goals and Supportive Policies/Programs	
Policy LU-3.5	Varying Housing Typologies. Support the development of a broad range of housing types, to increase housing choice, neighborhood diversity, and innovative design.	
Policy LU-3.6	Aesthetic Enhancement. Encourage aesthetic enhancement of residential areas, while retaining the quality of individual neighborhoods.	
Policy LU-3.7	Residential Intensification Criteria. When considering development proposals that include the following characteristics: (1) intensify residential zoning or land use designations; (2) change land use designations from commercial to residential; (3) granting a residential density above the maximum density range established by the Gen Plan; (4) change land use designations from residential to commercial; or (5) an intensification of commercial, The City shall only permit such changes (1-5 above) when the following criteria have been musubject to City Council approval: (a) effective mitigation of environmental constraints, noise, traffic, and other hazards; (b) excellence of design; (c) compatibility with adjacent development; and (d) at least one of the following: provision of affordable housing pursuant to the policies in City's Housing Element or the provision of parkland or recreation facilities.	
Goal LU-4	To ensure that commercial and mixed-use development in the city is consistent with the overall community character and serves the existing and future needs of residents and visitors.	
Policy LU-4.1	Retail Center Enhancement. Encourage new commercial uses to group into clustered areas or centers containing professional offices, retail sales and services. Clustered development shall locate at the intersections of major thoroughfares	
Policy LU-4.2	Strip Commercial Conversion. Encourage existing strip commercial uses to be redeveloped into pedestrian-friendly, contemporary shopping environments	
Policy LU-4.3	Neighborhood Connectivity. Encourage commercial and mixed-use development to link to adjoining residential neighborhoods by incorporating well-designed and attractive streetscapes with sidewalks, bicycle paths, and street amenities	
Policy LU-4.4	Capture Local Spending. Encourage the development of a broad range of commercial uses that capture a greater share of local spending and reduce residents' reliance upon travel to nearby communities.	
Policy LU-4.5	Vertical and Horizontal Mixed-use. Encourage vertical and horizontal mixed-use development at key intersections and within neighborhoods that result in distinct and cohesive pedestrian-oriented places that provide additional neighborhood-serving amenities and intensified economic vitality.	
Policy LU-4.6	Commercial and Mixed-Use Project Impacts. Consider the impact of new commercial and mixed-use projects and substantial enlargements or additions on schools and public agencies.	
Policy LU-4.7	Commercial Intensification Criteria. When making decisions regarding intensification of commercial land uses, the City shall only permit such changes when the change in land use is reasonably expected by the City Council to result in: (a) effective mitigation of environmental constraints, noise, traffic, and other hazards; (b) excellence of design; (c) compatibility with adjacent development; and (d) at least one of the following: provision of affordable housing pursuant to the policies in the City's Housing Element or the provision of parkland or recreation facilities or equivalent funding for development of such facilities.	

ID#	Goals and Supportive Policies/Programs	
Goal LU-5	Protect and enhance Pleasant Hill's quality of life and unique identity while continuing to grow and change	
Policy LU-5.1	Measure J Compliance. Implement and ensure compliance and consistency with the Measure J Growth Management Program Implementation Documents.	
Policy LU-5.2	Costs of Growth. Require that new development pays its fair share of costs associated with the overall growth in the region.	
Policy LU-5.3	Compliance with Performance Standards. Require that all new development comply with the City's performance standards for fire, police, parks, water, flood control, sanitary sewer, and transportation facilities.	
Policy LU-5.4	Evaluate Project Approval. Approve new development only after finding that performance standards will be maintained following project occupancy. If necessary, require project-specific actions to ensure compliance.	
Policy LU-5.5	Development Contribution Requirement. Require all new development to contribute to or participate in the improvement of park, school, police, sanitary, water, and flood control services in proportion to the demand generated by the development's occupants and users.	
Policy LU-5.6	Fiscal and Economic Impact. Consider fiscal impact analyses for major development proposals to identify any burden or unintended negative economic impacts on the City, the school district, or other public agencies and to ensure the burdens are sufficiently mitigated.	
Goal LU-6	Create distinct and identifiable places for future development within Pleasant Hill that enhance community character, prosperity, and civic pride.	
Policy LU-6.1	DVC Coordination. Coordinate with DVC on future development efforts to ensure consistency between the City's and DVC's goals and actions.	
Policy LU-6.2	Encourage the creation of a DVC District. Encourage development of a vibrant, walkable district centered around DVC and Golf Club Road that includes student and faculty housing, retail, and daily service uses for students, faculty, and staff.	
Policy LU-6.3	Creek Access from Businesses. Encourage businesses to provide secondary access to the creek and future multi-use trails.	
Policy LU-6.4	Enhanced Connectivity. Support the expansion of alternative transportation options including enhancements to the multi-use trail, expanded bike lanes along Golf Club Road, and additional connections between new and existing development.	
Policy LU-6.5	Structured Parking. Encourage new DVC development to provide structured parking in lieu of surface parking to provide opportunity for common open space and development of underutilized sites.	
Policy LU-6.6	Access to Contra Costa Canal Trail. Require new development to provide secondary access to the Contra Costa Canal Trail.	
Policy LU-6.7	Comprehensive Planning Process. Development of the Mangini-Delu site shall be subject to a comprehensive planning process that assures the site is planned and developed in a coordinated, integrated manner. A plan for the site shall, at a minimum, shall include a traffic study and parking analysis, review of site orientation and clustering of development, preservation of natural habitat, inclusion of open space and onsite amenities, and review of compatibility and consistency with surrounding development.	
Policy LU-6.8	Housing Diversity. Require future development of the Mangini-Delu site to include a variety to housing types.	
Policy LU-6.9	Transition between Surrounding Development. Require development of the Mangini-Delu site to incorporate design and development techniques meant to implement a seamless transition between existing residential neighborhoods and proposed development.	
Policy LU-6.10	Cluster Development. Promote clustered development on the Mangini-Delu site to allow for enhanced opportunities to preserve and/or create open space and resident amenities.	

ID#	Goals and Supportive Policies/Programs	
Policy LU-6.11	Limited Access. Limit access points into the Mangini-Delu site onto Taylor Boulevard and Pleasant Hill Road, if appropriate, to ease congestion and mitigate traffic impacts.	
Policy LU-6.12	Creek Access. Require new development of the Mangini-Delu site to provide publicly accessible walking trails that provide access to the creek.	
Policy LU-6.13	Creek Preservation and Incorporation. Coordinate with Contra Costa Flood Control and Water Conservation District (CCFCD) to support creek preservation on the Mangini-Delu site and the incorporation of environmentally friendly flood control measures.	
Policy LU-6.14	Downtown Identity. Continue to reinforce and enhance the identity of Downtown as the commercial, civic, and cultural center of Pleasant Hill.	
Policy LU-6.15	Downtown Expansion. Support the expansion of the Downtown commercial core to include the intersection of Contra Costa Boulevard and Gregory Lane, by further accommodating a broader array of uses and activities.	
Policy LU-6.16	Walkable Environment. Enhance the pedestrian connections between Downtown, Crescent Drive City Hall, and adjacent commercial centers along Contra Costa Boulevard.	
Policy LU-6.17	Entertainment Hub. Enhance Downtown Pleasant Hill as the entrainment hub of the city by attracting new restaurants, entertainment venues, and retail establishments.	
Policy LU-6.18	Vertical Mixed-Use. Encourage the addition and conversion of underutilized upper floor spaces to incentivize additional residential uses.	
Policy LU-6.19	Civic-Oriented Uses. Encourage the establishment of civic-oriented uses Downtown such as a city arts/performing arts venue, further promoting Downtown as the civic center of the community.	
Policy LU-6.20	Community Gathering Spaces. Support enhancements to community gathering spaces through additional amenities such as seating areas and public Wi-Fi.	
Policy LU-6.21	Enhancement of Industrial Sites. Support the incorporation of flexible accessory uses that benef existing industrial businesses and employees.	
Policy LU-6.22	Diversity of Uses. Support the development of expanded light industrial, research and development, and collaborative workspaces within the Hookston Industrial Area.	
Policy LU-6.23	Low Employment Uses. Discourage the establishment of low employment uses such a warehousing and distribution centers in the Hookston Industrial Area.	
Policy LU-6.24	Flexible Development. Ensure that zoning regulations in the Municipal Code pertaining to industrial development are flexible enough to facilitate the conversion of underperforming industrial sites, into higher intensive uses.	
Policy LU-6.25	Transit-Oriented Development. Encourage the design and development of transit-oriented developments along Contra Costa Boulevard to support future transportation system enhancements.	
Policy LU-6.26	Strip Commercial. Support compact commercial development by discouraging new "strip" center development patterns along Contra Costa Boulevard. Strip centers are characterized by low-density commercial frontage with parking in front of the building and multiple access driveways	
Policy LU-6.27	Pedestrian Oriented Development. Support the transformation of existing auto-oriented and stri commercial uses into attractive pedestrian-oriented developments that enhance the visual character and interest of the boulevard.	
Policy LU-6.28	Parcel Consolidation. Support parcel consolidation in the East Vivian Neighborhood to stimulate future mixed-use development.	
Policy LU-6.29	Limit Driveways and Curb Cuts. Support limiting new driveways and curb cuts and encourage consolidating existing driveways and curb cuts as Contra Costa Boulevard redevelops.	
Policy LU-6.30	Street Activation. Encourage active street fronts to create vibrant spaces for the community to congregate, including paseos, courtyards, expanded outdoor dining, expanded sidewalks, and enhanced landscaping.	

ID#	Goals and Supportive Policies/Programs	
Policy LU-6.31	Increased Residential Development. Support increased residential development along Contra Costa Boulevard in the form of either vertical or horizontal mixed-use projects.	
Policy LU-6.32	Commercial Use Design. Support the design of commercial uses on Contra Costa Boulevard that relate to, and reflect uses adjacent to and behind, those uses, with careful attention to design themes common to specific blocks along the boulevard.	
Policy LU-6.33	Mixed-Use Compatibility. Ensure that development of the mixed-use parcels on the west side of Contra Costa Boulevard considers the interface with the lower-density parcels to the west of Shirley Drive. The mixed-use area shall be connected to- not walled off from -, the lower-density residential area, but designed in a way that reduces conflict and promotes compatibility between uses.	
Policy LU-6.34	Transform Gregory Lane. Support the transformation of Gregory Lane into an attractive streetscape that includes neighborhood-serving mixed-use with active frontages facing the street, wider sidewalks, expanded bicycle lanes, and consistent landscaping.	
Policy LU-6.35	Parcel Consolidation. Support parcel consolidation along Gregory Lane, between Pleasant Hill Roa and Contra Costa Boulevard to stimulate future neighborhood-serving mixed-use development.	
Policy LU-6.36	Parking Management Considerations. Support alternative parking management techniques and development standards for new development on Gregory Lane.	
Policy LU-6.37	Pedestrian Friendly Design. Encourage the expansion of Gregory Lane pedestrian and bicyclist infrastructure to create a more multi-modal friendly environment that increases overall safety.	
Policy LU-6.38	Neighborhood-Serving Mixed-Use. Encourage the development of Gregory Lane to attract low-intensity, neighborhood-serving mixed-use development.	
Policy LU-6.39	Development Compatibility. Require Gregory Lane mixed-use projects to apply design and development techniques to ensure a seamless transition between adjacent low-density residential.	
Policy LU-6.40	Safety Enhancements. Promote Taylor Boulevard safety enhancements for pedestrians and cycl to lessen and mitigate potential vehicular collisions.	
Policy LU-6.41	Taylor Boulevard Access. Support limiting access points from development fronting Taylor Boulevard to enhance pedestrian, cyclist, and vehicular safety.	
Policy LU-6.42	Neighborhood-Serving Mixed-Use. Encourage the development of Oak Park Boulevard to attract low-intensity neighborhood-serving mixed-use development.	
Policy LU-6.43	Development Compatibility. Require Oak Park Boulevard mixed-use projects to apply design and development techniques to ensure a seamless transition between adjacent low-density residential	
Policy LU-6.44	Commercial Nodes. Promote the investment and enhancement of the existing retail centers at Oa Park and Patterson Boulevard to create a vibrant commercial node.	
Policy LU-6.45	EBMUD Trail Connections. Promote and encourage the connectivity of new Oak Park Boulevard development to the EBMUD Trail.	
Policy LU-6.46	Parcel Consolidation. Support parcel consolidation along Oak Park Boulevard, east of Patterson Boulevard to stimulate future neighborhood-serving mixed-use development.	
Policy LU-6.47	Parking Management Considerations. Support alternative parking management techniques and development standards for new development on Oak Park Boulevard.	
Policy LU-6.48	Pedestrian Connectivity. Require Monument Boulevard pedestrian upgrades including signalized crossings, bulb outs, and expanded sidewalks.	
Policy LU-6.49	Mobile Home Park Preservation. Encourage private-sector investments to maintain the existing mobile home park and discourage the conversion of the mobile home park to alternative uses.	
Policy LU-6.50	Circulation Enhancements. Require upgrades to the Monument Boulevard street network to improve overall traffic flow pending approval of new development.	
Policy LU-6.51	Gateway Entry. Support the implementation of city gateway signage or monument at the entrance to Pleasant Hill from Concord southwest of Mohr Lane.	

ID#	Goals and Supportive Policies/Programs	
Policy LU-6.52	Iron Horse Trail Connections. Support and encourage new Monument Boulevard developments to provide secondary access and additional connections to the Iron Horse Trail.	
Policy LU-6.53	Increased Residential Development. Support increased residential development along Monumen Boulevard in the form of either vertical or horizontal mixed-use projects.	
Policy LU-6.54	Office Conversion. Support the conversion of designated Ellinwood Way office sites to multi-family and mixed-use to provide additional housing and retail opportunities for Pleasant Hill residents.	
Policy LU-6.55	Freeway Buffering. Encourage additional Ellinwood Way buffering techniques to mitigate potential noise impacts from Interstate 680 on future mixed-use development.	
Policy LU-6.56	Standalone Residential. Support the inclusion of standalone multi-family residential developments on Ellinwood Way.	
Goal LU-7	Improve the health and well-being of all Pleasant Hill residents.	
Policy LU-7.1	Health in All Policies. Prioritize the overall health of residents in city strategies, programs, daily operations, and practices.	
Policy LU-7.2	Alternative Transportation Improvements. Support new development and infrastructure improvements in existing neighborhoods that enable and encourage people to drive less and walk, bike, or take public transit more.	
Policy LU-7.3	Remove Physical Barriers. Remove or plan for ways to address physical barriers that bisect neighborhoods and discourage walking or biking.	
Policy LU-7.4	Outdoor Spaces. Encourage all new development to include designated areas or other shared spaces for outdoor uses.	
Policy LU-7.5	Aging in Place. Promote community health, safety, and neighborhood cohesiveness by supporting a range of housing types, such as affordable, multi-generational, independent and assisted living, and neighborhood amenities that allow residents to age in place.	
Goal LU-8	Ensure that all land use decisions benefit all residents and do not create a disproportionate burden to any resident based on age, identity, income, race, color, educational status, or national origin.	
Policy LU-8.1	Health and Safety Impacts. Consider potential adverse health and safety impacts associated with land use decisions and reduce negative impacts associated with hazardous materials, industrial activities, facility locations, and design features on City residents.	
Policy LU-8.2	Incompatible Land Uses. Prohibit the introduction of new incompatible land uses and environmental hazards into existing residential areas.	
Policy LU-8.3	Public Service and Infrastructure Equity. Provide public services and infrastructure, including parks, recreational facilities, community gardens, and public safety facilities, equitably to all city residents.	
Policy LU-8.4	Safe and Sanitary Housing. Provide standards for development that promote safe and sanitary housing through implementation of the Housing Element.	
Goal LU-9	Ensure all residents have equal access to healthy foods, education, green spaces, and medical services.	
Policy LU-9.1	Access to Community Assets. Identify and address gaps in access to residential, commercial, recreation facilities, natural open spaces areas, and physical and mental health resources, to help ensure that these resources are equally available to all residents.	
Policy LU-9.2	Equity in Capital Projects. Equitably invest in capital improvements citywide.	
Policy LU-9.3	Healthy Food Providers. Encourage farmers' markets and healthier food options, including grocery and other stores that sell fresh food products, particularly near child-oriented uses. (e.g., schools, day care, parks).	

ID#	Goals and Supportive Policies/Programs	
Policy LU-9.4	Government-issued Vouchers. Coordinate with farmer's market vendors and local food retailers to accept payment through Electronic Benefit Transfer (EBT), which allows residents in the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to purchase food with their program benefits.	
Goal LU-10	Fully engage the public in City decision-making and facilitate public involvement in civic life.	
Policy LU-10.1	Transparent Public Decision-Making. Ensure transparent public decision-making processes through effective public outreach, engagement, and participation that is inclusive of socially disadvantaged individuals and groups.	
Policy LU-10.2	Scheduling City Events. Schedule City events using different days, times, and formats (i.e., virtual and digital accessibility) to encourage and facilitate participation among community members with work, school, and other obligations that conflict with more traditional scheduling.	
Policy LU-10.3	Community Budgeting. Engage the community through multiple participation opportunities in the City's budget process.	
Policy LU-10.4	Collaboration. Continue to collaborate with other organizations and groups to provide services and programs for all city residents.	
Policy LU-10.5	Youth Engagement. Encourage students from all grades, including their families to attend and participate in City events, activities, and public meetings such as the City Council, Planning Commission, and Architectural Review Commission.	
Goal LU-11	Promote the effective use and implementation of the General Plan Land Use Diagram.	
Policy LU-11.1	Land Use Diagram. Maintain and implement a Land Use Diagram describing the types of allowed land uses by geographic location and the density of allowed uses within each designation.	
Policy LU-11.2	Land Use Designations. Apply land use designation to all parcels of land as depicted on the General Land Use Diagram.	
Policy LU-11.3	Zoning Designations. Ensure that zoning designations are consistent with the General Land Use Diagram.	
Policy LU-11.4	General Plan Amendments. Ensure that amendments to the General Plan land use designations, General Plan Land Use Diagram or General Plan text are consistent with the General Plan vision, guiding principles, and relevant goals and policies.	
Goal LU-12	Provide a clear framework for the ongoing administration, maintenance, and implementation of this General Plan consistent with State law.	
Policy LU-12.1	General Plan Review. Conduct a technical review of the General Plan as necessary to assure compliance with State law and responsiveness to current City needs.	
Policy LU-12.2	Implementation Program Monitoring. Maintain and annually review the General Plan Implementation Programs. As part of this process, the City shall update the prioritization of programs based on applicability, relevance, timing of initiation, and availability of funding.	
Implementation Pr	ograms	
Program A	Citywide Objective Design Standards. Prepare a comprehensive set of citywide objective design standards for all types of development (e.g., residential, mixed-use, commercial, industrial) consistent with the policies in the 2040 General Plan.	
Program B	Five-Year Review of Design Standards. Review and amend the citywide objective design standards every five years to ensure proposed development is meeting the expectations of the community and is properly implementing the General Plan.	
Program C	Streetscape Improvements. Install streetscape improvements, pedestrian access elements, and public spaces to areas outside of downtown, and require new development in those areas to incorporate complementary features.	
Program D	Public Space Funding. Promote funding for public space improvements in the City's biannual Capital Improvements Plan.	

ID#	Goals and Supportive Policies/Programs	
Program E	In-lieu Options for Public Art, Benefits, and Amenities Requirements. Prepare a study to explore in-lieu options for public art requirements, such as paying funds or setting aside space for future installation for projects below a certain size.	
Program F	Utility Undergrounding Study. Conduct a study evaluating the feasibility of requiring undergrounding of utilities in conjunction with installation or modification of public and private improvements.	
Program G	Visual Impacts Minimization Requirement. Amend the Zoning Ordinance to require minimization of visual impacts from structures adjacent to scenic routes.	
Program H	Scenic Route Landscaping Plans. Prepare provisions for scenic routes and corridors landscaping plans, including reviewing the scenic setback.	
Program I	Mangini-Delu Master Plan. Prepare a Master Plan for the Mangini-Delu site. The Master Plan at a minimum shall include:	
	 a robust community outreach and engagement process; 	
	traffic study and parking analysis;	
	 review of site orientation and clustering of development; 	
	incorporation of objective design standards;	
	preservation of natural habitat;	
	inclusion of open space and onsite amenities;	
	 outreach and collaboration with the Recreation and Park District; and 	
	 review of compatibility and consistency with surrounding development. 	
Program J	Taylor Boulevard Evaluation. Prepare an evaluation of potential safety measures and traffic calming options to address commute traffic problems on Taylor Boulevard resulting from cutthrough traffic.	
Program K	Monument Boulevard Upgrades. Prepare an analysis of necessary Monument Boulevard upgrades including signalized crossings, bulb outs, expanded sidewalks, roadway improvements, and gateway signage. The analysis should include improvement prioritization, cost estimates, funding sources, and a timeline for improvements.	
Program L	Pedestrian and Bicycle Barrier Removal. Prepare an analysis of the physical barriers to walking and bicycling throughout the city. Identify options and prepare a program for barrier removal. The analysis should include improvement prioritization, cost estimates, funding sources, and a timeline for improvements.	
Program M	Five-year General Plan Review. Conduct a technical review of the General Plan every five years and revise and update as necessary to assure compliance with State law and responsiveness to current City needs.	
Source: Bloacant L	lill, City of. 2022. Pleasant Hill Draft 2040 General Plan Land Use Element.	

Housing Element

State law requires that housing elements shall be updated every eight years. The proposed housing element update, the 2023-2031 Housing Element, identifies adequate sites to accommodate a variety of housing types for all income levels and needs of special population groups defined under State law, analyzes governmental constraints to housing maintenance, improvement, and development, addresses conservation and improvement of the condition of existing affordable housing stock, and outlines policies that promote housing opportunities for all persons. The 2040 General Plan updates the City of Pleasant Hill Housing Element as part of the 6th Cycle planning period.

⁷ Pursuant to California Government Code Sections 65580 to 65589.8.

⁸ Pursuant to California Government Code Section 65583.

Pleasant Hill 2040 General Plan

As part of the 6th Cycle housing element update, cities are required to identify housing sites that provide the development capacity to accommodate build out of the City's RHNA allocation at all income levels. To accommodate the City's RHNA need for all income levels, future housing development would occur through a variety of methods as detailed in the Housing Resources section of the 2023-2031 Housing Element. This would include infill development within existing residential and commercial areas, development of accessory dwelling units (ADU), and entitled projects within Pleasant Hill. Housing elements are also required to consider ways to promote access to housing that is attainable for residents at all income levels, beyond focusing solely on opportunities for production of new units.

HOUSING ELEMENT UPDATE COMPONENTS

The update to the Housing Element would comply with State legislation passed since adoption of the City of Pleasant Hill General Plan in 2011 and revisions in 2015 and 2019. The 2023-2031 Housing Element would reflect current conditions and include the following components: ⁹

- Introduction: An introduction and overview of the 2023-2031 Housing Element process and legal requirements, including data sources used to compile the Housing Element and its relationship to other General Plan Elements. This section also details the extent of public participation in the development of the Housing Element.
- Housing Needs Assessment: A discussion of Pleasant Hill's demographic and economic characteristics, along with growth projections for Northern California, housing growth forecasts compared to recent population and housing growth; and current housing stock in Pleasant Hill.
 This section also includes an assessment of populations with special housing needs.
- Housing Constraints Analysis: An analysis of market, regulatory, and environmental constraints on housing production, cost, and maintenance.
- Housing Resources: This section describes and analyzes the resources available for development, rehabilitation and preservation of housing in Pleasant Hill. This includes the availability of land resources and the ability to satisfy the City's share of the regional housing need, and financial resources available to support the provision of affordable housing.
- Housing Plan: This section contains objectives and policies that would address housing-related issues and to achieve the City's overarching housing goals. This section also contains quantified objectives for the development of housing and preservation of affordable housing in Pleasant
- Appendices: The appendices offer a summary of public outreach, a summary of homeless facilities, a review of the accomplishments under the 2015-2023 Housing Element, the residential sites inventory, and a summary of Assembly Bill 686, Affirmatively Furthering Fair Housing (AFFH).

CHANGES IN STATE HOUSING LAW

Many new state housing laws have been enacted since the last housing element update cycle. The 2023-2031 Housing Element incorporates and addresses all pertinent housing law changes through analysis or new policies or programs. The 2023-2031 Housing Element is consistent with these

⁹ Pleasant Hill, City of. 2022. Draft 2023-2031 Housing Element.https://pleasanthill2040.com/images/docs/PHGPU_04_Housing_PD_2022%2010%2020_GPAC%20Revisions.pdf (accessed January 2023)

changes in State law, all of which are detailed in the introduction of the 2023-2031 Housing Element and are summarized below:

- Affordable Housing Streamlined Approval Process: SB 35 (2017), AB 168, and AB 831 These bills support a streamlined, ministerial review process for qualifying multi-family, urban infill projects in jurisdictions that have failed to approve housing projects sufficient to meet their state-mandated RHNA.
- Additional Housing Element Sites Analysis Requirements: AB 879 (2017) and AB 1397 (2017) These bills require additional analysis and justification of the sites included in the sites inventory of the City's Housing Element.
- Affirmatively Furthering Fair Housing: AB 686 (2017) AB 686 requires the City to administer its housing programs and activities in a manner to affirmatively further fair housing and not take any action that is inconsistent with this obligation.
- No-Net-Loss Zoning: SB 166 (2017) SB 166 amended the No-Net-Loss rule to require that the land inventory and site identification programs in the Housing Element include sufficient sites to accommodate any unmet RHNA, should it exist. The Pleasant Hill sites inventory far exceeds the City's RHNA, allowing for additional sites to be used for additional housing units as needed.
- By Right Transitional and Permanent Supportive Housing: AB 2162 (2018) and AB 101 (2019) AB 2162 requires Pleasant Hill to change its zoning to provide a "by right" process and expedited review for supportive housing. Additionally, AB 101 requires that a Low Barrier Navigation Center development be an allowed use by right in mixed-use zones and nonresidential zones permitting multi-family uses if it meets specified requirements.
- Accessory Dwelling Units: AB 2299 (2016), SB 1069 (2016), AB 494 (2017), SB 229 (2017), AB 68 (2019), AB 881 (2019), AB 587 (2019), SB 13 (2019), AB 670 (2019), AB 671 (2019), and AB 3182 (2020) The 2016 and 2017 updates to State law included changes pertaining to the allowed size of accessory, permitting ADUs by right in at least some areas of a jurisdiction, and limits on parking requirements related to ADUs. More recent bills reduce the time to review and approve ADU applications to 60 days, remove lot size and replacement parking space requirements, and require local jurisdictions to permit junior ADUs.
- Density Bonus: AB 1763 (2019) and AB 2345 (2020) AB 1763 amended California's density bonus law to authorize significant development incentives to encourage 100 percent affordable housing projects, allowing developments with 100 percent affordable housing units to receive an 80 percent density bonus above the otherwise maximum allowable density on the site. AB 2345 created additional density bonus incentives for affordable housing units provided in a housing development project. It also requires that the annual report include information regarding density bonuses that were granted.
- Housing Crisis Act of 2019: SB 330 SB 330 enacts changes to local development policies, permitting, and processes that will be in effect through January 1, 2025. Recent updates to this act include SB 8 (2019), which extended the operation of SB 330 until January 1, 2030.
- Surplus Land Act Amendments: AB 1486 and AB 1255 (2019) AB 1486 refines the Surplus Land Act to provide clarity and further enforcement to increase the supply of affordable housing. AB 1255 requires the City to create a central inventory of surplus and excess public land each year. The City is required to transmit the inventory to the California Department of Housing and Community Development (HCD) and to provide the list to the public upon request.

Pleasant Hill 2040 General Plan

- Housing Impact Fee Data: AB 1483 (2019) AB 1483 requires the City to publicly share
 information about zoning ordinances, development standards, fees, exactions, and affordability
 requirements.
- Emergency and Transitional Housing Act of 2019: AB 139 (2019) AB 139 established new criteria for evaluating the needs of the homeless population.
- Standardization of Sites Inventory Analysis and Reporting: SB 6 (2019) SB 6 requires the City to electronically submit the sites inventory to HCD starting in 2021.

REGIONAL HOUSING NEEDS ASSESSMENT

The Regional Housing Needs Assessment (RHNA) is a California State Housing Law requirement that is part of the periodic process of updating local general plan housing elements. It is a process that determines existing and projected housing needs (i.e., RHNA allocation) for all jurisdictions in the state (including cities and unincorporated county areas) with the intent to provide opportunities for a mix of unit types, tenure, affordability, and help achieve greenhouse gas (GHG) emission reductions from cars and light trucks. The RHNA allocation process is conducted by the State and regional planning agencies every eight years. Pleasant Hill is a member city of the Association of Bay Area Governments (ABAG), which allocates a fair share of the total RHNA housing needed for each income category (as determined by the State) to the cities and unincorporated areas in the ABAG region. The RHNA quantifies the housing need in each jurisdiction for all economic segments of the community across four income categories: very low, low, moderate, and above moderate. Each jurisdiction must demonstrate in its Housing Element that it can accommodate the assigned RHNA at all income levels. This may include the identification of current vacant land that can accommodate residential use or infill sites that permit residential development. If the City cannot identify enough sites/parcels appropriately zoned to accommodate RHNA allocations, then the City must identify additional candidate housing sites.

The California Department of Finance population estimates and the RHNA are both used for regional transportation planning purposes. Senate Bill 375 (SB 375) integrates RHNA with the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (RTP/SCS). In the past, the RHNA was undertaken independently from the RTP. The California Legislature passed SB 375 in 2008 as the land use and transportation planning component of the State's effort to reduce vehicle miles traveled (VMT) to achieve the GHG emission reduction goals of the Global Warming Solutions Act of 2006 (Assembly Bill 32 [AB 32]). The law recognizes the importance of planning for housing and land use in creating sustainable communities where residents of all income levels have access to jobs, services, and housing by using transit, walking, or bicycling.

State Housing Law also requires that the RHNA process be consistent with the following objectives:

- Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in all jurisdictions receiving an allocation of units for low- and very low-income households
- Promoting infill development and socioeconomic equity, protecting environmental and agricultural resources, and encouraging efficient development patterns
- Promoting an improved intraregional relationship between jobs and housing
- Allocating a lower proportion of housing need to an income category when a jurisdiction already
 has a disproportionately high share of households in that income category
- Affirmatively furthering fair housing

The RHNA allocates housing need based on future estimates of housing unit growth need over the RHNA planning period (2023-2031). The RHNA identifies the projected number of dwelling units that will be needed to accommodate estimated future growth need during the planning period at specified levels of affordability. In December 2021, ABAG issued its final 6th Cycle RHNA Allocation Plan, which determined that the City of Pleasant Hill needs to accommodate 1,803 dwelling units. Table 2-4 indicates the RHNA allocation by income category. These categories are determined as a percentage of county area median income (AMI), adjusted for household size. Through the RHNA allocation, the California Department of Housing and Community Development (HCD) seeks to distribute the range of very low-, low-, moderate-, and above moderate-income dwelling units among all cities in the State to ensure each jurisdiction allocates a fair share of the full range of housing types.

Table 2-4 Pleasant Hill RHNA Allocation for 2023-2031 by Income Category

Income Category (% of County AMI)	Number of Units	Percent ¹
Very low (<50%)	566	31%
Low (50% - 80%)	326	18%
Moderate (80% - 120%)	254	14%
Above moderate (>120%)	657	36%
Total	1,803	100%

AMI = Area Median Income

Note: ¹Percentages are rounded to nearest whole numbers. Source: ABAG RHNA Allocation Report, December 2020

PROPOSED HOUSING UNITS AND OPPORTUNITY SITES

The 2023 – 2031 Housing Element identifies 12 housing opportunity sites totaling approximately 36 acres. Additionally, the RHNA would include currently entitled or approved projects that are under construction or are pending construction and are expected to be completed during the sixth cycle RHNA period. There are 10 entitled or approved projects that would account for 91 low-income, 10 moderate-income, and 276 above-moderate-income units. Pursuant to Government Code Section 65583.1, the City can satisfy its regional housing need using ADU and junior accessory dwelling unit (JADU) trends and existing resources and incentives that promote their development. In 2019, 2020, and 2021, the City approved an average of 25 ADUs per year. As a conservative total, HCD recommends a minimum assumption equal to the average permitted total for recent years, which equates to 200 units. However, the City currently estimates a total of 320 ADUs or JADUs to be constructed through 2031.

The Housing Element must identify and analyze the City's housing needs and establish reasonable goals, objectives, and policies based on those needs. The 2023-2031 Housing Element must also identify housing opportunity sites with the potential to accommodate housing at higher densities to meet the City's assigned total low-income RHNA (extremely low, very low, and low income) category need. Pursuant to California Government Code 65583, a "default density" of 30 dwelling units per acre¹⁰ is deemed the appropriate density to accommodate Pleasant Hill's housing for lower-income households (pursuant to the State's population-based suburban category). The default density is considered by statute as appropriate to accommodate affordable housing at an acceptable density that contributes to the feasibility of lower-income housing units. As the City has limited availability of existing suitable land to accommodate future growth, it must identify

¹⁰ One acre equals 43,560 square feet.

City of Pleasant Hill

Pleasant Hill 2040 General Plan

adequate sites with the potential to be developed at this density to meet the RHNA need for the lower-income categories. Pursuant to AB 2348 and AB 1397 requirements, the City of Pleasant Hill will be required to accommodate future growth need through the identification of sites/parcels that can be rezoned entirely or where a zoning overlay can be applied that permit residential development at specific affordability levels in compliance with State law.

Housing opportunity sites are primarily located on underutilized sites along Contra Costa Boulevard, north of I-680, and near the intersection of Gregory Lane and Pleasant Hill Road. There are also some outlying sites that would be located on Golf Club Road in the northwestern portion of Pleasant Hill and on Monument Boulevard southwest of I-680. County Connection provides transit services along Contra Costa Boulevard, Gregory Lane, Pleasant Hill Road, Golf Club Road, and Monument Boulevard. Parks facilities near the housing opportunity sites would include Frank Salfingere Park, Pleasant Hill Park, and the Paso Nogal Open Space and Dog Park. Proposed housing opportunity sites are shown in Figure 2-6.

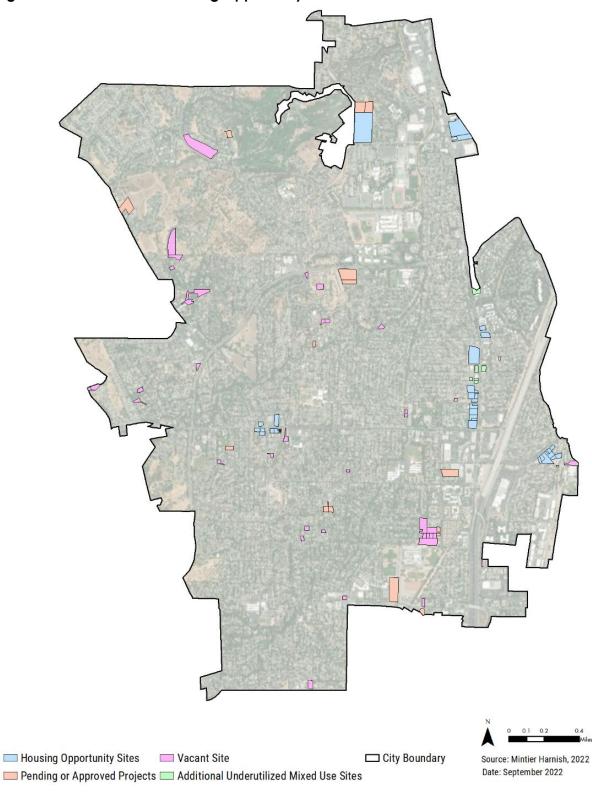


Figure 2-6 Pleasant Hill Housing Opportunity Sites Locations

PROPOSED HOUSING ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Housing Element are shown in Table 2-5.

Table 2-5 Pleasant Hill Housing Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Goal H-1	Maintain a housing supply sufficient to meet the housing needs of all Pleasant Hill residents.
Policy H-1.1	Monitor Development. Monitor residential and job producing development in the city in order to maintain and adequate housing supply for city residents.
Policy H-1.2	Maintain Adequate Supply. Maintain a sufficient supply of residential land with appropriate zoning to meet locally generated housing needs.
Policy H-1.3	Implement the Action Plan. Provide active leadership in implementing the policies and programs contained in the Housing Element
Policy H-1.4	Inter-jurisdictional Development. Encourage and facilitate inter-jurisdictional development of affordable housing.
Policy H-1.5	Encourage Higher Densities. Encourage development at the maximum allowed density to increase the quantity and affordability of the city's housing stock
Policy H-1.6	Provide Transparency. Provide transparency regarding information on housing-related actions, fees and programs.
Goal H-2	Promote diversity in tenure, type, size, location, and price to permit a choice of housing for persons of all economic levels throughout the city.
Policy H-2.1	Housing Types. Allow a variety of housing types in all residential zones.
Policy H-2.2	Remove Constraints. Remove constraints to production and availability of housing, where possible.
Policy H-2.3	Streamline Review. Facilitate streamlined review of below market rate and special needs housing projects.
Policy H-2.4	Mixed Use Development. Encourage mixed-use development in commercial zones, at underutilized sites, and along transportation corridors.
Policy H-2.5	Promote Accessory Dwelling Unit Production. Promote the development of Accessory Dwelling Units (ADUs) in all residential zones.
Policy H-2.6	Zone for Lot Splits and ADUs. Support SB 9 lot splits in residential zones.
Goal H-3	Increase housing opportunities for lower- and moderate-income households.
Policy H-3.1	Preference Policy. Facilitate construction of affordable housing by prioritizing new projects that include units for lower-income segments of the community.
Policy H-3.2	Workforce Housing. Look for opportunities to promote the development or preservation of housing affordable to those who work in Pleasant Hill.
Policy H-3.3	Low- and Moderate-income Housing. Participate in programs assisting production or preservation of affordable units in order to provide housing for low- and moderate-income households.
Policy H-3.4	Direct Assistance. Provide direct assistance to individuals and households needing affordable housing.
Goal H-4	Provide direct assistance to individuals and households needing affordable housing.
Policy H-4.1	Incentivize Special Needs Housing. Provide incentives for and encourage development of senior housing, and housing for the developmentally, mentally, and physically disabled, at sites where proximity to services and other features make it desirable.
Policy H-4.2	Support Shelter Efforts. Support efforts to provide temporary shelter for homeless persons.
Goal H-5	Protect and rehabilitate the existing housing stock.
Policy H-5.1	High Quality Neighborhoods. Maintain and enhance the quality of Pleasant Hill's neighborhoods so they will retain their value as they mature.

ID#	Goals and Supportive Policies/Programs
Policy H-5.2	Housing Preservation. Preserve Pleasant Hill's existing housing stock in habitable condition.
Policy H-5.3	Single-family Remodeling and Additions. Encourage updating and remodeling of single-family residences
Policy H-5.4	Livable Neighborhoods. Provide public services and improvements that keep neighborhoods safe and livable.
Goal H-6	Preserve the City's affordable housing stock whenever and wherever feasible.
Policy H-6.1	Discourage Conversion to Non-residential Uses. Discourage the conversion of older residential units to non-residential uses.
Policy H-6.2	Preserve Affordable Units. Ensure that units produced for low- and moderate-income households are made available to those households and maintained as affordable units.
Policy H-6.3	Condominium Conversion. Prohibit conversion of multi-family rental units to market rate condominiums if such conversions would reduce the number of rental apartments to less than 20 percent of the city's housing stock or if the rental apartment vacancy rate in the City is below 5 percent.
Goal H-7	Assure that housing programs maximize opportunity and housing choice throughout the city and proactively work to overcome patterns of economic segregation and discrimination based upon age, sex, race, sexual orientation, religion, familial status, ethnic background, or disability.
Policy H-7.1	Anti-discrimination. Ensure that individuals and families seeking housing in Pleasant Hill are not discriminated against on the basis of income, age, disability, sex, gender, sexual orientation, family structure, national origin, ethnicity, religion, occupation, or other similar factors.
Policy H-7.2	Fair Housing Service Provider. Support the fair housing services provider.
Policy H-7.3	Public Investments. Ensure public investments are equitably distributed throughout the community.
Policy H-7.4	AFFH Consideration. Evaluate affirmatively furthering fair housing goals in all housing related decisions.
Goal H-8	Require energy conserving practices in the maintenance of existing dwellings and in new residential development, additions, and remodeling.
Policy H-8.1	Energy Conservation Practices. Encourage energy conservation practices for new and existing residential dwellings
Policy H-8.2	Sustainable Building Practices. Require the use of green building and sustainable practices for new and renovation residential projects throughout the City, in compliance with State law.
Source: Pleasant H	ill, City of. 2022. Pleasant Hill Draft 2040 General Plan Housing Element.

Transportation and Circulation Element

The Transportation and Circulation Element addresses the movement of people and goods in and around Pleasant Hill. Pleasant Hill's transportation network and services provide mobility for residents, employees, and visitors, and serve goods movement throughout Pleasant Hill. The transportation network includes the roadway network, walking, bicycling, and transit to and from Pleasant Hill and surrounding BART stations, and travel modes provided by Transportation Network Companies (TNCs), such as Uber and Lyft.

The five main tenets of the City's transportation and circulation policy framework are listed below. Policy statements and programs would support this framework.

- 1. Safety
- 2. Accessibility
- 3. Mobility

Pleasant Hill 2040 General Plan

- 4. Connectivity
- 5. Community

PROPOSED BIKEWAY NETWORK

The Pleasant Hill Bicycle and Pedestrian Master Plan guides the expansion and improvement of bicycle facilities Citywide. The network would include bicycle facility gap closures on key routes, bicycle facilities, and bicycle facility upgrades (e.g., from Class III to Class I, Class II, or Class IV). The recommended bikeway network would represent a more extensive and connected bicycle network within Pleasant Hill and connect bicyclists to high-demand destinations within and adjacent to Pleasant Hill.

PROPOSED TRANSPORTATION AND CIRCULATION ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Transportation and Circulation Element are shown in Table 2-6.

Table 2-6 Pleasant Hill Transportation and Circulation Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Goal TC-1	Establish and maintain a safe and efficient circulation system that emphasizes the use of existing arterial and collector roadways, paths, and bike lanes.
Policy TC-1.1	Rights-of-Way. Maintain existing circulation system rights-of-way, except as necessary to address localized congestion areas.
Policy TC-1.2	Multimodal Travel Options. Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.
Policy TC-1.3	Community Input on Complete Streets. When planning and designing for complete streets, receive input from groups and individuals representing the various types of users of City streets.
Policy TC-1.4	Community Input on Roadway Improvements . Support the sponsoring of forums to obtain citizen input to develop roadway improvements aimed at improving traffic circulation, reduce traffic speeding, and maximizing person throughput.
Goal TC-2	Improve traffic circulation along the city roadway network.
Policy TC-2.1	Traffic Plan Requirement. Require new development to establish comprehensive construction traffic plans, for approval by City staff, which denote haul routes, detours, and other factors that may impact public safety.
Policy TC-2.2	Level of Service. Maintain a Level of Service (LOS) of LOS D or better (as defined in this Element) for all public roadways, including Routes of Regional Significance, except when maintaining LOS D would require infrastructure changes that conflict with General Plan policies or programs affecting the pedestrian network, bicycle network, safe routes to school plans, or transit access. Provide biannual (every two years) data collection, monitoring, and reporting.
Policy TC-2.3	LOS Standards and Conditions of Approval. Approve new development which at least meets or is mitigated to meet adopted LOS standards, as documented in the City Findings of Consistency.
Policy TC-2.4	Traffic Impact Study. Require traffic impact studies (including VMT and LOS analysis) as part of the application review process for development projects.
Policy TC-2.5	Transportation Demand Management (TDM). Require robust transportation demand management with all new private development that requires establishment of incentives and programs to reduce traffic congestion including annual reporting to ensure transportation demand management goals for a project are being met and to correct transportation demand managemen practices.

ID #	Cools and Curroutive Polisies/Presums
ID#	Goals and Supportive Policies/Programs
Policy TC-2.6	Safe Routes to School (SR2S). Establish a Safe Routes to School program in collaboration with the school districts and private schools that identifies and promotes suggested routes to school and incentivizes students and parents to use alternative transportation modes for school commutes.
Policy TC-2.7	Retail, Commercial, and Industrial Areas . Develop a plan to improve site access, circulation, and safety to support potential future development and re-development of certain retail, commercial and industrial areas where warranted.
Goal TC-3	Encourage slower vehicle speeds and discourage cut-through traffic along City roadways, especially within residential neighborhoods and along freeway bypass routes.
Policy TC-3.1	Residential Streets. Prioritize traffic calming improvements and enforcement efforts along residential roadways that have recurring cut-through traffic or excessive speeding.
Policy TC-3.2	Arterial and Collector Streets. Minimize opportunities for regionally generated cut-through vehicle travel in the city as part of new roadway projects or projects within public roadways.
Policy TC-3.3	Vehicle Traffic Calming Devices. Consider traffic calming devices such as lane narrowing, widening medians, neighborhood traffic circles, roundabouts, and landscaping to discourage cut-through vehicle traffic.
Policy TC-3.4	Alternative Methods to Prevent Cut-Through Vehicle Traffic. Consider the use of alternative street surfacing materials, traffic diverters, special designs, and stop signs to prevent cut-through traffic on residential streets.
Policy TC-3.5	Monument Triangle Congestion. Support the reconfiguration of the Monument Triangle circulation network and to improve vehicle, pedestrian, and bicycle safety while reducing congestion anticipated from future development.
Policy TC-3.6	School Area Congestion. Work with the Mount Diablo Unified School District, private schools, and Diablo Valley College to address traffic speeds and congestion near schools and on key access routes.
Goal TC-4	Reduce congestion and vehicle trips through land use planning.
Policy TC-4.1	Transportation Mode Mix. Plan for appropriate mix of transportation modes and the infrastructure to support these modes to meet community needs.
Policy TC-4.2	Develop Thoroughfares. Develop and improve thoroughfares based on existing and proposed land use patterns and projected demand.
Policy TC-4.3	Urban Limit Line. Promote orderly and efficient growth in existing urban areas and protect open space by adhering to the County's Urban Limit Line, which the City has adopted.
Policy TC-4.4	Infill Development. Support infill and development in existing urban areas and around key transit facilities.
Policy TC-4.5	Correlation Between Land Use and Transportation. Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.
Goal TC-5	Support a vibrant, walkable environment that encourages alternative (non-driving) modes of transportation.
Policy TC-5.1	Evaluate Multimodal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).
Policy TC-5.2	Impact Mitigation Costs. Require new development to pay costs necessary to mitigate project impacts on the local and regional transportation system, including establishment of trails and other alternatives to vehicle use as specified in the Capital Improvement Plan and Citywide Bicycle and Pedestrian Master Plan.

ID#	Goals and Supportive Policies/Programs
Policy TC-5.3	Mobility Technology Support. Identify and implement technology that supports walking, biking, commuting, and other alternative transportation modes within the City including infrastructure that supports micro mobility use within the City.
Goal TC-6	Reduce reliance on the automobile by promoting alternative modes of transportation.
Policy TC-6.1	Encourage Non-Driving Forms of Personal Mobility. Encourage bicycling, walking, and other forms of personal mobility, like e-scooters, e-bikes, and neighborhood electric vehicles, as energy conserving, non-polluting modes of travel.
Policy TC-6.2	Private Development of Transportation Facilities. Encourage private entities to develop and maintain publicly accessible transportation facilities, including transit, pedestrian, and bicycle facilities.
Policy TC-6.3	Non-Vehicular Transportation Requirement. Require new developments that would result in significant increases in air pollution, VMT or noise to incorporate non-vehicular facilities or programs that would reduce the overall project impacts on these resources including e-Bike charging stations and free use e-Bike pod stations for residential and commercial development.
Policy TC-6.4	Amenities for Non-Driving Modes of Transportation. Require new development with more than 10 housing units or over 5,000 square feet of non-residential uses to include amenities that encourage active modes of transportation that reduce pollution or VMT as a benefit to the community (e.g., bicycle lockers/racks, showers, dedicated vanpool or carpool parking areas, dedicated shuttle services, e-bike charging stations innovative bus shelter designs).
Policy TC-6.5	Encourage Development of Alternative Fuel Infrastructure. Encourage development of infrastructure (public and private) to support the use of electric and other alternative fuel vehicles.
Policy TC-6.6	Leverage Regional Trail Facilities. Encourage the exploration of regional approaches to the use of inter-jurisdictional trails such as the Contra Costa Canal Trail and the Iron Horse Trail for all trip purposes.
Goal TC-7	Focus on integrated regional transportation planning to better serve the residents of Pleasant Hill.
Policy TC-7.1	Multi-Jurisdictional Transportation Planning. Participate in multi-jurisdictional transportation planning through TRANSPAC and CCTA activities to ensure all City planning efforts, projects, and developments comply with regional requirements and standards.
Policy TC-7.2	Transportation Conflict Resolution. Participate in the Contra Costa Transportation Authority's conflict resolution process as needed to resolve disputes related to preparation and implementation of Action Plans and other programs described in this Element.
Policy TC-7.3	Routes of Regional Significance Designations. Work with TRANSPAC and CCTA in the designation of Routes of Regional Significance.
Policy TC-7.4	Central County Action Plans for Routes of Regional Significance. Work with TRANSPAC to update and implement the Central County Action Plans for Routes of Regional Significance.
Goal TC-8	Encourage the development of a comprehensive and integrated transportation network with infrastructure and design features that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, youth, and families.
Policy TC-8.1	Complete Streets Principles. Apply complete streets principles when building new, or rehabilitating existing, roadways, consider the following design elements: Sidewalks and curbs as a standard design principle. Bicycle lanes and/or shared lanes as a standard design principle. Transit accessibility as a standard design principle. Shade trees and planting strips as a standard design principle along roadways
Policy TC-8.2	Review for Complete Streets. Review street reconstruction, new development, and utility projects to incorporate complete street elements when feasible, including trails, bus stop enhancements, and bicycle/pedestrian facilities.

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ID#	Goals and Supportive Policies/Programs
Policy TC-10.2	Safe and Interconnected Trails. Work with other responsible/owner agencies to ensure the trails system is designed to be safe and interconnected, incorporating on-street connections where needed, designed for pedestrians and/or bicyclists, and consistent with other relevant plans.
Policy TC-10.3	Safe Trail Crossings. Provide safe trail crossings at surface streets for all non-motorized users. This requires the installation of signs, striping, pavement markings, and actuated traffic control devices where applicable.
Policy TC-10.4	New Trails. Coordinate with East Bay Municipal Utility District and other agencies to explore new trail opportunities to provide connections to parts of the City without off-road bicycle and pedestrian connections.
Goal TC-11	Increase the number of bicycle and pedestrian trips by users of all ages and abilities.
Policy TC-11.1	Bicycle and Pedestrian Network. Support a network of safe and comfortable bikeway and pedestrian facilities connecting neighborhoods and destinations in Pleasant Hill and adjacent jurisdictions.
Policy TC-11.2	Street Design. Require street cross-sections to accommodate bicyclists, micro-mobility users, and pedestrians.
Policy TC-11.3	Protected Bicycle Facilities. Consider incorporating protected bicycle and pedestrian facilities in higher density land use areas and along major transportation corridors to the greatest extent feasible.
Goal TC-12	Strive to eliminate all fatal and serious injury bicycle- and pedestrian-related crashes.
Policy TC-12.1	Collision Database. Create a traffic count data and collision database and work with applicable Cit departments and law enforcement to map collision data for identifying problem areas.
Policy TC-12.2	Design Standards. Support design upgrades to bicycle and pedestrian facilities to increase connectivity and safety citywide.
Policy TC-12.3	Bicycle and Pedestrian Education. Support bicycle and pedestrian safety education in all Pleasant Hill schools. Continue to support Safe Routes to Schools programs to address pedestrian and bicycle safety.
Policy TC-12.4	Safe Routes to School (SR2S). Support Safe Routes to School infrastructure and education & encouragement programs to address and enhance pedestrian and bicycle safety. Develop Suggested Route to School maps for Pleasant Hill schools to help prioritize infrastructure improvements along routes supporting student commutes.
Policy TC-12.5	Technology Safety Enhancements. Identify and deploy technology solutions to support bicycle and pedestrian safety through the City including passive detection systems at traffic signals and trail crossings.
Policy TC-12.6	Bike Route Connectivity. Develop and sign a network of bicycle routes that provide connectivity between homes, job centers, schools and other frequently visited destinations.
Policy TC-12.7	Emphasis on Walking and Biking. Encourage more people to walk and bicycle for a variety of purposes.
Policy TC-12.8	Bicycle Parking. Support the expansion of the bicycle parking network in Pleasant Hill.
Policy TC-12.9	Supportive Infrastructure. Encourage the implementation of supportive infrastructure and programs.
Policy TC-12.10	Safe Intersections for Bicycles. Ensure adequate crossing times and detection for bicycle users at signalized intersections.
Policy TC-12.11	Commute Information. Promote 511 Contra Costa alternative commute mode materials to encourage reduced reliance on vehicular use.
Policy TC-12.11	Bike to Work Day. Promote and support a Bike to Work Day.
Goal TC-13	Reduce congestion and vehicle trips through non-automobile transportation.
Policy TC-13.1	Bus and Rail Services. Coordinate with local transit providers (i.e., bus, paratransit, and rail services to provide expanded schedules and services that meet the needs of Pleasant Hill residents.

ID#	Goals and Supportive Policies/Programs
Policy TC-13.2	Innovative Transportation Technologies. Work with transit providers, employers, schools, and developers to encourage innovative technologies that promote more effective and expanded use of transit and facilitate other innovations to serve first and last mile travel, such as mobility hubs and micro-mobility (e-scooters, e-bikes).
Policy TC-13.3	Support County Connection Improvements. Support County Connection to improve all types of accessibility and comfort for their facilities and to incorporate intermodal facilities where feasible.
Policy TC-13.4	Transit for Commuters and Special Needs Populations. Work with transit providers and other regional TDM entities to promote and incentivize use of transit for commuters, seniors, students, and persons with disabilities.
Policy TC-13.5	Senior Van Service. Maintain the City's Senior Van Service for residents over the age of 55, subject to the availability of funding.
Goal TC-14	Provide for the safe and efficient movement of goods to support commerce, industry, and the community.
Policy TC-14.1	Minimize Truck Conflicts. Minimize potential conflicts between trucks and pedestrian, bicycle, and transit travel on streets designated as truck routes.
Policy TC-14.2	Minimize Truck Loading and Unloading Conflicts. Minimize potential conflicts between truck loading and unloading and pedestrian, bicycle, and transit travel.
Policy TC-14.3	Minimize Truck Impacts on Air Quality and Noise Levels. Minimize the impact of truck parking and loading/unloading activities on air quality and noise levels.
Policy TC-14.4	Truck Route Network. Develop a signage program that identifies truck routes.
Goal TC-15	Reduce vehicle trips and vehicle trip lengths and manage vehicle congestion through a comprehensive program of transportation resources and services.
Policy TC-15.1	TDM Alternatives. Meet the increased transportation needs of the community with TDM alternatives.
Policy TC-15.2	Require TDM Programs. Require new development to implement appropriate TDM programs to encourage walking, biking, carpooling, and transit use, and to reduce vehicle trips.
Policy TC-15.3	TDM for New Development. All new development with more than 10 housing units or over 5,000 square feet of non-residential uses shall be required to include a detailed and measurable TDM program.
Policy TC-15.4	Require Travel Demand Model Application. Require the City or developers to apply CCTA's travel demand model and Technical Procedures to the analysis of land use projects requiring General Plan Amendments (GPAs) and developments exceeding specified threshold per Measure J requirements.
Policy TC-15.5	Help Maintain Travel Demand Modeling System. Assist CCTA in maintaining its travel demand modeling system by providing information on proposed transportation improvements, including those adopted as part of the City's Capital Improvement Program, planned and approved development within the city and long-range plans relative to MTC/ABAG's projections for household and jobs within the city.
Policy TC-15.6	TDM Measures for Non-Residential Land Uses. Encourage measures to reduce vehicular trips and vehicle-miles travelled (VMT). Examples are the provision of on-site childcare and after-school care facilities, and on-site modular mini-conference rooms for virtual meetings.
Implementation	Programs
Program A	Transportation System Management Ordinance. Update the transportation system management (TSM) ordinance or resolution as needed, to comply with CCTA's model TSM ordinance.
Program B	Vision Zero. Adopt and maintain a vision zero action plan that monitors areas of high accident rates and identify mitigation measures to eliminate traffic-related fatalities and severe injuries.
Program C	Right-of-way Improvement Identification. Identify specific roadway segments where improvements may be needed to improve safety, circulation, multimodal access, or other infrastructure needs.

ID#	Goals and Supportive Policies/Programs
Program D	LOS Standards. Amend the General Plan, Zoning Ordinance, Capital Improvement Program or other relevant City plans and regulations as necessary to attain the LOS standards and establish VMT criteria.
Program E	Evaluate Congested Intersections. Every five (5) years, evaluate citywide intersection level-of-service for peak hour congestion and develop mitigation measures.
Program F	Commercial Area. Develop a plan to improve access, circulation, and safety for potential future development and re-development of the Monument Boulevard Triangle as shown in Figure TC-2 in the 2040 General Plan.
Program G	Non-automobile Commute Incentives. Prepare an analysis of potential incentives to encourage City employees to commute to work using alternative means, including BART and bus passes, ridesharing, van pooling, and secure bicycle storage facilities.
Program H	Regional Transportation Mitigation Program Implementation. Implement TRANSPAC's Regional Transportation Mitigation Program as needed when assessing new development and its impacts to regional and sub-regional routes.
Program I	Complete Streets Best Practices. Develop and apply a complete streets best practices checklist to guide the design and review of proposed transportation improvement projects incorporating appropriate provisions from standard reference guidelines from federal, state and local sources (e.g., Federal Highway Administration, Caltrans, MTC, ABAG, ITE, etc.)
Program J	Citywide Bicycle Plan and Pedestrian Master Plan. Update every seven (7) years the Citywide Bicycle Plan and Pedestrian Master Plan to specify bicycle and pedestrian facility networks, and to identify and prioritize bicycle and pedestrian facility needs in the city.
Program K	Explore Independent Alignments. Prepare an analysis of potential for the dedication and preservation of independent alignments, including utility, abandoned waterways, and railroad rights of way, for the development of bicycle paths.
Program L	Review and Maintenance of Benchmarks. Ensure public bicycle and pedestrian needs are regularl reviewed by preparing and maintaining benchmark pedestrian and bicyclist volumes and movements.
Program M	Collision Database. Prepare and regularly update a collision database to track and implement transportation public safety measures.
Program N	Bicycle and Pedestrian Design Standards. Prepare updated design standards and upgrades for bicycle and pedestrian facilities consistent with the Bicycle and Pedestrian Master Plan.
Program O	Accessibility Improvements Grants. Identify and apply for grants that may be used to assist in the funding of projects that will improve access for persons with disabilities.
Program P	Incentivized Reduced Vehicle Trips. Create incentives for existing employers to reduce their vehicle trips.
Program Q	Promote Carpools and Vanpools. Promote the use of carpools and vanpools by supporting and advertising services and programs implemented by 511ContraCosta.org, which operates transportation demand management (TDM) programs and services in the city.
Program R	Transportation Demand Management System. Develop a transportation demand management program checklist and seek to fund TDM fee.
Program S	Capital Improvement Plan. Prepare and regularly update a Capital Improvement Plan that identifies roadways and transportation improvements needed to implement the general plan goal and policies for each five-year planning period, including the budgeting of local funds, development fees, and various State/Federal grants secured for the implementation of the various projects and programs
Program T	Suggested Routes to School. Develop a Suggested Route to School Program that includes new Suggested Routes to School Map and Education & Encouragement programs.
Program U	Bike Route Connectivity. Develop and sign a network or bicycle routes that provide connectivity between homes, job centers, schools, and other frequently visited destinations.

ID#	Goals and Supportive Policies/Programs
Program V	Truck Route Network. Develop a signage program that identifies truck routes.
Program W	Non-motorized Bicycle Requirements. Develop city code requirements regarding the use of non-motorized bicycles including compliance and enforcement.
Program X	E-Bike and E-Scooter Requirements. Develop city code requirements regarding the use of e-bikes and e-scooters including compliance and enforcement.

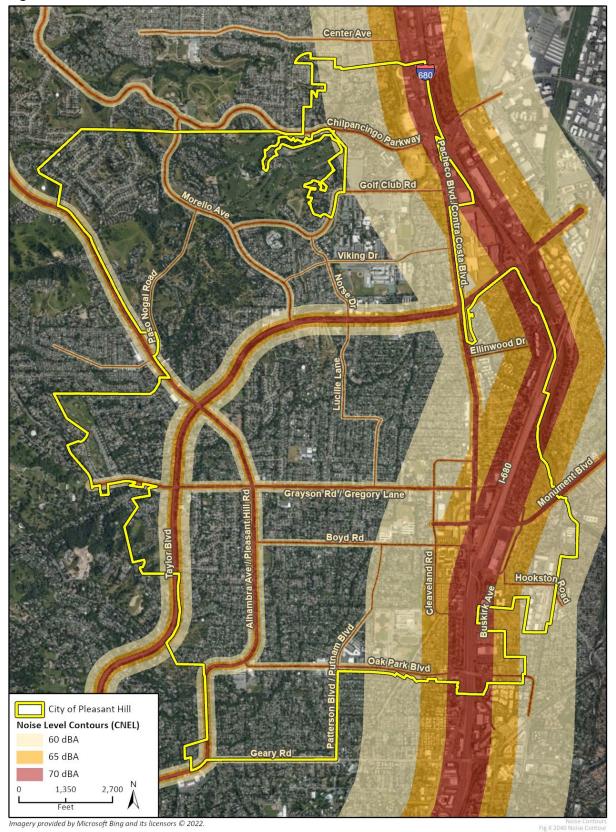
Hazards and Safety Element

The Hazards and Safety Element evaluates natural and urban safety hazards in Pleasant Hill and outlines goals, policies, and implementation programs to minimize risk to life and property. The primary natural hazard threats for Pleasant Hill are earthquakes, drought, localized flooding, wildland fires, and an increased number of high heat days. Many of the goals and policies in this element correspond to local and regional safety priorities such as those established in the Contra Costa County Hazard Mitigation Plan (CCCHMP), a multi-jurisdictional document that helps coordinate more than three dozen participating jurisdictions to reduce risk from the most prevalent natural disasters in the county. Likewise, many of the goals and policies will correspond with the City's Comprehensive Emergency Management Plan (CEMP).

NOISE CONTOURS ASSESSMENT

Pleasant Hill noise characteristics are described within the 2040 General Plan Hazards and Safety Element including descriptions of common sources of noise as well as goals and policies to lessen noise for sensitive land uses (e.g., residences, schools, medical facilities). As required pursuant to the Governor's Office of Planning and Research (OPR) Guidelines, the Hazards and Safety Element also includes a map of noise contours as depicted via lines that represent equal levels of noise exposure across Pleasant Hill. Noise contours information informs planning decisions, including siting of potential future sensitive land uses. A map of Pleasant Hill 2040 General Plan noise contours is shown in Figure 2-7.

Figure 2-7 Pleasant Hill 2040 General Plan Noise Contours



PROPOSED HAZARDS AND SAFETY ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Hazards and Safety Element are shown in Table 2-7.

Table 2-7 Pleasant Hill Hazards and Safety Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Goal HS-1	Ensure the city is prepared for health, natural and human-caused hazards and can respond quickly and effectively.
Policy HS-1.1	Emergency Preparedness Planning. Coordinate with regional agencies and incorporate emergency preparedness into all City emergency planning efforts, including preparation, communications, response, emergency equipment access, and evacuations.
Policy HS-1.2	Hazards Education and Information. Provide hazard awareness information and education about potential health, natural, and human-caused hazards in Pleasant Hill and how to responsibly prepare for or mitigate them.
Policy HS-1.3	Essential Facility Location. Prohibit siting of essential, public safety, or emergency service facilities, special occupancy structures, or hazardous materials storage facilities in areas subject to the following hazard areas, unless the structure is designed to adequately mitigate the hazard or if no other viable option for siting is available to serve the need identified: 500-year flood zones;
	seismic hazard areas and fault zones;
	 areas subject to liquefaction, landslide, or seiche hazards; and
	 very high fire severity zone.
Policy HS-1.4	Neighborhood Planning Efforts. Encourage neighborhoods to create localized emergency action plans to further inform residents on how to prepare and respond to hazards.
Policy HS-1.5	Social Unrest Planning. Institute planning efforts related to social unrest and civil disobedience.
Goal HS-2	Reduce the potential harm to people and property from geologic and seismic hazards.
Policy HS-2.1	Earthquake Hazard. Require new development to be sited away from high-risk earthquake hazard or liquefaction-susceptibility zones, or if located in a high-risk zone, to incorporate building technologies to reduce risk to an acceptable level.
Policy HS-2.2	Geotechnical Study Requirement. Require geotechnical studies for new development in areas with moderate to high liquefaction potential that include analysis of seismic settlement potential and specify appropriate mitigation.
Policy HS-2.3	Seismic Retrofit Incentives. Work with regional, State, and Federal agencies and organizations to incentivize seismic retrofits of structures.
Policy HS-2.4	Slope Failure. Prohibit new development in areas at risk for slope failure and ensure that hillside developments employ appropriate design and construction techniques consistent with City hillside development standards.
Policy HS-2.5	Emergency Service Building Construction. Ensure that buildings and structures required for emergency services are constructed to withstand a major earthquake.
Policy HS-2.6	Unbuildable Spaces. Preserve property that is unbuildable due to geologic conditions as open space.
Policy HS-2.7	Community Readiness. Improve community readiness regarding earthquake and other natural disaster response through community outreach.
Policy HS-2.8	Resilient Infrastructure. Require the location, design, and construction of new public utilities, communication infrastructure, and transportation facilities to minimize risk and maximize functionality during and after an earthquake.
Policy HS-2.9	Slope Stability Assessment. Continue to require slope stability assessments by appropriately registered professionals upon the initiation of new development proposals in areas of known slope instability and/or on slopes steeper than 15 percent.

ID#	Goals and Supportive Policies/Programs
Goal HS-3	Minimize the threat to people, property, and the environment from fire hazards.
Policy HS-3.1	Fire Protection District Enhancement. Enhance the ability of the Contra Costa County Fire Protection District to respond to and suppress fires.
Policy HS-3.2	Weed abatement and Fire-Resistant Landscaping. Require annual weed and other fuel abatement and promote the installation of fire-resistant landscaping in new and existing development.
Policy HS-3.3	Homeowner Education. Educate homeowners of defensible space requirements and recommendations per Cal Fire, including programs to aid in removal of excess vegetation and improve home wildfire resiliency.
Policy HS-3.4	Fire Safety Improvements. Develop guidelines for fire safety improvements for existing and new commercial buildings and encourage upgrades where possible.
Policy HS-3.5	Defensible Space Inspections. Coordinate with the Contra Costa County Fire Protection District to require annual home and business inspections to ensure proper defensible space is maintained at properties near grasslands and very high wildfire hazard severity zones.
Policy HS-3.6	Inter-jurisdictional Coordination. Coordinate with the Contra Costa County Fire Protection District, East Bay Regional Park Fire Department, and other neighboring fire departments to reduce fire hazards and promote fire safety in and around Pleasant Hill.
Policy HS-3.7	Contra Costa County Hazard Mitigation Plan. Ensure the Contra Costa County Hazard Mitigation Plan as it applies to Pleasant Hill is up to date with changes in State hazard legislation and lessons learned from recent wildfire related disasters.
Policy HS-3.8	Adequate Water Pressure. Coordinate with local water districts to seek funding and implement the necessary infrastructure upgrades to provide adequate water pressure to supply required fire suppression systems in existing and future development projects.
Policy HS-3.9	Weed And Fuel Abatement. Coordinate with landowners to ensure that weed and other fuel abatement occurs in an effective and timely manner.
Policy HS-3.10	Municipal Code Maintenance. Ensure the Pleasant Hill Municipal Code is kept up to date on State and Federal requirements, best practices, and City processes regarding wildfire prevention design standards and requirements.
Policy HS-3.11	Evacuation Routes. The City shall collaborate with Contra Costa County and neighboring cities as a part of the next Multijurisdictional Hazard Mitigation Plan update to identify evacuation routes in the event of wildfires or other natural disasters in compliance with AB 747 and SB 99.
Goal HS-4	Minimize the effects of drought by creating an emphasis of routine water conservation.
Policy HS-4.1	Municipal Water Conservation. Continue to identify opportunities to upgrade City facilities with water-conserving appliances and using reclaimed water for irrigation, landscaping, and other allowable uses
Policy HS-4.2	Residential Water Conservation. Implement and maintain cost-effective, citywide water conservation and efficiency programs for all customers through education, rebates, assistance programs, and building requirements.
Policy HS-4.3	Water Conservation Measures. Reduce the amount of water used by development by requiring compliance with adopted water conservation measures.
Goal HS-5	Minimize the potential for serious flooding and drainage problems including damage to property, loss of life, and economic displacement
Policy HS-5.1	Flood Damage Potential Reduction. Reduce flood damage potential in areas known to be prone to flooding.
Policy HS-5.2	Flood Emergency Response. Maintain and improve the ability of the Police, Maintenance and Engineering departments to respond to flood emergencies.
Policy HS-5.3	City Staff Training. Ensure City staff have ongoing, adequate training to support the Floodplain Management Program.

ID#	Goals and Supportive Policies/Programs
Policy HS-5.4	Development Stormwater Impacts. Require new development to manage stormwater runoff in a safe, responsible manner. Where possible, implement a zero-discharge policy.
Policy HS-5.5	Development in Floodplains. Minimize development in the 100-year floodplain and require projects in the 100- and 500-year floodplains to incorporate required stormwater management and flood-prevention design measures.
Policy HS-5.6	Low-Impact Development. Require low-impact development (LID) measures in new development, major remodeling projects, and public projects to limit the amount of impervious surface in new development and to increase retention, treatment, and infiltration of urban stormwater runoff.
Policy HS-5.7	Creek Clean-Up. Coordinate with regional agencies and local volunteer groups to clear debris from creeks within the City to allow water to flow uninterrupted minimizing the impact of flooding.
Goal HS-6	Ensure that airport operations do not adversely affect quality of life and safety for residents.
Policy HS-6.1	Airport Land Use Compatibility Plan Adherence. Ensure consistency with the County Airport Land Use Compatibility Plan development restrictions.
Policy HS-6.2	Airport Coordination. Coordinate with Buchanan Field Airport on land use considerations when compatibility issues may occur on the border of the airfield.
Goal HS-7	Ensure the community is protected from noise that interferes with human activity or causes health problems.
Policy HS-7.1	Noise Level Standards. Require new development to be designed and constructed to meet acceptable noise level standards adopted by the City.
Policy HS-7.2	Noise Impact Mitigation. Evaluate the noise impacts of new development based on the potential for significant increases in noise levels, in addition to compliance with acceptability standards and require mitigation, if necessary, to comply with City noise standards.
Policy HS-7.3	Transportation Agency Cooperation. Proactively cooperate with transportation agencies, including Caltrans and CCTA, to reduce noise from existing and future transportation facilities, including the development of noise reduction strategies related to the design and location of a facilities.
Policy HS-7.4	Residential Site Design Noise Consideration. Protect residential areas from noise and vibration by requiring appropriate site and building design, sound walls, and landscaping and by the use noise attenuating construction techniques and materials.
Policy HS-7.5	Noise Restrictions in Commercial and Industrial Developments. Require new commercial and industrial developments adjacent to residential uses to reduce potential noise impacts to compute with City noise standards.
Goal HS-8	Reduce the exposure to hazardous substances and the resulting potential for injuries, economic and social displacement, and loss of life.
Policy HS-8.1	Hazardous Materials Business Plans. Monitor and regulate hazardous materials by requiring the preparation and periodic updating Hazardous Materials Business Plans for and periodic inspections of all businesses in the city that handle, store, use, or transport hazardous material
Policy HS-8.2	Water and Air Supply Protection. Work with public agencies and private organizations to identify and eliminate hazardous material releases into the water and air supply.
Policy HS-8.3	Site Assessment Requirement. Require Phase I Site Assessments for projects on all properties where toxins could occur.
Policy HS-8.4	Alternative Practices. Minimize the use of toxic and hazardous materials in Pleasant Hill, promoting sustainable materials and practices where possible.
Policy HS-8.5	Household Hazardous Waste. Expand and promote household hazardous waste programs to safely dispose of items such as paint, gasoline, engine oil, batteries, and cleaners.
Policy HS-8.6	Hazardous Material Transportation Routes. Work with appropriate agencies to identify and require all transport of hazardous materials to follow approved routes.

ID#	Goals and Supportive Policies/Programs
Goal HS-9	Reduce the potential and severity of short- and long-term health emergencies, control the rate and extent of the spread of an illness, reduce economic and social displacement, and minimize loss of life.
Policy HS-9.1	Implement Public Health Guidance. Implement all guidance from appropriate State and Contra Costa County agencies relative to declared public health emergencies.
Policy HS-9.2	Agency Coordination During Public Health Emergencies. Work closely with the State and Contra Costa County health officials during a public health emergency to assure that City needs are considered and addressed and appropriate programs and resources are made available.
Policy HS-9.3	Essential Health Services Delivery. Partner with organizations responsible for essential health care and human services to ensure those services are provided as early as possible during the response, recovery, and return of the public health system after a public health emergency.
Policy HS-9.4	Community Education and Communication. Continue to maintain and enhance the City's communications and education resources to provide timely and up-to-date information concerning public health emergencies.
Policy HS-9.5	Preparedness . Work with the State and Contra Costa County to maintain a supply of resources necessary to respond to early stages of a public health emergency
Policy HS-9.6	Continuity of Service. Work with the State and Contra Costa County to develop a series of procedures that would support and assist the health care system at the level necessary to maintain continuity of services and operations in the case of a medical surge during a natural disaster and/or public health emergency.
Implementation F	Programs
Program A	Review of the Comprehensive Emergency Management Plan. Update and review the Pleasant Hill Comprehensive Emergency Management Plan (CEMP) every five years to ensure it reflects current needs and changing conditions.
Program B	Emergency Facilities Evaluation. Conduct an evaluation of public buildings and structures that provide emergency services and response, such as fire and police facilities, as well as community facilities that serve as evacuation centers or refuge sites to identify retrofitting necessary to ensure the stability and safety of such facilities in the event of a disaster.
Program C	Response Drills. Conduct emergency hazard drills with key stakeholder organizations and school districts across the community to improve preparedness for known threats and hazards.
Program D	Household Preparedness. Expand educational and informational programs that help and encourage each household in the city to be prepared to be self-sufficient for at least two weeks after a major earthquake, flood, terrorism event, pandemic, or other major disaster.
Program E	Update Preparedness Materials. Review and update the City's earthquake preparedness information website and materials annually to keep them current. Develop and implement an effective means to disseminate these materials to city residents and businesses.
Program F	Assist the Fire District. Coordinate with Contra Costa County Fire Protection District to assist with training efforts when appropriate and feasible and review of new development to assure adequacy of access for equipment, water supplies, construction standards, and vegetation clearance.
Program G	Wildfire Design Standards. Review and update the Pleasant Hill Municipal Code every five years to ensure it incorporates the most up-to-date standards and requirements for wildfire mitigation and risk reduction. If needed, amend the Code to include recently passed legislation or significant changes in building standards or best practices.
Program H	Contra Costa County Multijurisdictional Hazard Mitigation Plan. The City shall actively participate in the next update of the Contra Costa Multijurisdictional Hazard Mitigation Plan that, among other outcomes, will identify evacuation routes in the city in compliance with AB 747 and SB 99.

ID#	Goals and Supportive Policies/Programs
Program I	Updates to the Municipal Code. Update the Pleasant Hill Municipal Code to comply with State, Federal, and Regional (Contra Costa Flood Control District Standards) requirements, best practices, and City stormwater management and flood control measures.
Program J	Watershed Analysis Study. Conduct a Watershed Analysis Study of runoff and drainage systems to predict areas of insufficient capacity in the storm drain and natural creek system.
Program K	Identify Capital Improvement Projects for Flood Prone Areas. Develop a prioritized list of proposed capital improvement projects for low-lying, flood-prone areas, and seek funding for those projects.
Program L	Data on Low-lying Areas. Augment existing Geographic Information System (GIS) and other data with information about low-lying areas obtained during storms
Program M	Public Safety Personnel Training. Train Police and Maintenance and Engineering Division personnel to a level appropriate to their positions and responsibilities to respond to flood emergencies.
Program N	Porous Pavement Municipal Code Standards. Update the Municipal Code to encourage that parking and low-impact drive areas with 20 or more parking spaces to install porous pavement to reduce runoff and include. vegetative buffers and islands.
Program O	Establish Acoustical Study Requirement Areas. Prepare acoustical study requirements based on the City noise contour map that will determine when acoustic studies shall be required sensitive land uses.
Program P	Noise Level Standards. Amend Municipal Code Chapter 9.15 to establish clear, measurable, and acceptable exterior noise level standards for all new developments and additions, including capital improvement projects. The amended Chapter shall include procedures to measure and monitor noise, and enforcement procedures.
Program Q	Dialogue with Caltrans. Encourage Caltrans to resurface all designated concrete roads within the City to reduce vehicle noise.
Program R	Noise in Residential Areas. Amend the city noise ordinance to prohibit activities such as garbage and recycling pickup, parking lot vacuuming in residential areas, and the use of all landscape equipment.
Program S	Personal Protective Equipment Supply. The City should maintain a supply of Personal Protective Equipment (PPE) for City essential workers (i.e., City staff, contractors, vendors, and volunteers) that protects these workers during initial stages of a public health emergency.
Program T	Continuity of Operations Plan. The City shall develop a Continuity of Operations Plan (COOP) as a standalone plan or as part of a larger emergency management plan for both short-term and long-term emergencies. The COOP should outline a set of procedures to implement as needed in preparation of and during a natural disaster and/or public health emergency.

Environment Element

The Environment Element is a new component of the proposed General Plan. The purpose of the Environment Element is to preserve, protect, and enhance the natural resources that make Pleasant Hill a unique place. The Environment Element addresses a broad range of topics, including air and water quality; natural, biological, and cultural resources; and sustainability. Other goals of the Environment Element are to improve water and air quality and to conserve energy through programs that reduce consumption and promote sustainable alternatives.

PROPOSED ENVIRONMENT ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Environment Element are shown in Table 2-8.

Table 2-8 Pleasant Hill Environment Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Goal ENV-1	Provide an adequate water supply for residential, business, and other uses needed to support the existing and projected city population.
Policy ENV-1.1	Adequate Water Supply and Delivery. Work with water districts and Central San to assure adequate water supply for, and delivery to, existing and future customers in Pleasant Hill.
Policy ENV-1.2	Green Building Code. Enforce the Green Building Code to ensure the design, construction, operation, use, and occupancy of new construction and remodeling are subject to contemporary water efficiency standards
Policy ENV-1.3	Commercial and Business Water Conservation. Require new or remodeled commercial and industrial development to make changes that conserve water, to the extent feasible. This could include utilizing efficient plumbing fixtures, installing drought-tolerant and water-wise landscaping, and harvesting rainwater for irrigation.
Policy ENV-1.4	Municipal Water Conservation. Require, where feasible, that City facilities install efficient plumbing fixtures in new construction or renovations, replacing inefficient plumbing fixtures, and installing drought-tolerant and water-wise landscaping to conserve water.
Policy ENV-1.5	Water Conservation in Public Facilities. During construction or renovation of public facilities, institute water conservation measures such as hot-on-demand water faucets, low-flush toilets, and low-water-using appliances.
Policy ENV-1.6	Recycled Water at Public Facilities. Partner with Central San to expand recycled water lines to public facilities to connect public landscape irrigation systems to a recycled water distribution system when renovating or developing new public facilities.
Policy ENV-1.7	Water Supply Resiliency. Work with Central San and the DVWS to expand the use of recycled and other non-potable water for landscape irrigation and other appropriate uses.
Goal ENV-2	Protect the quality of water resources in Pleasant Hill.
Policy ENV-2.1	Drainage System Maintenance. Maintain and upgrade the city drainage system, including regularly clearing drainage systems of debris build up that exacerbates flood impacts.
Policy ENV-2.2	Drainage Improvements. Cooperate with regional agencies to complete regional storm drainage improvements.
Policy ENV-2.3	Limit Parking Areas. Discourage additional parking for any new development unless the developer can demonstrate the need for additional parking.
Policy ENV-2.4	Alternative Paving Methods. Encourage alternative materials and designs to limit driveways, parking areas and parking lots citywide, including pervious paving material, turf stones, and "ribbon strip" driveways.
Policy ENV-2.5	Alternative Drainage Design. Continue to require bioswales and other innovations in new development to allow runoff from parking lots and all impervious area to drain into landscaped areas and rainwater percolate into the ground.
Policy ENV-2.6	Creek Preservation. Creek setbacks, where feasible, should exceed minimum regulatory setback guidelines to protect native vegetation and enhance creek environments
Policy ENV-2.7	Watercourse Preservation. Preserve natural watercourses or provide naturalized drainage channels within the city. Where feasible, implement restoration and rehabilitation opportunities.
Policy ENV-2.8	Creek Clean-up. Collaborate with local and regional agencies, businesses, property owners, and organizations proactively to reduce litter, illegal dumping, and reestablish native vegetation along local creeks and waterways.

ID#	Goals and Supportive Policies/Programs
Goal ENV-3	Preserve and restore streams, wetlands, and riparian areas to function as open space and wildlife corridors.
Policy ENV-3.1	Creek Protection Zone Establishment for New Development. Establish creek protection zones for creeks that extend a minimum of 25 feet (measured from the top of a bank and a strip of land extending laterally outward from the top of each bank), with wider buffers where significant habitat areas or high potential wetlands exist. The City shall prohibit development within a creek protection zones, except as part of greenway enhancement, including habitat conservation, bike and walking paths, wildlife habitat, and native plant landscaping. City approval is required for the following activities within the creek protection zones: 1. Construction, alteration, or removal of any structure;
	 Excavation, filling, or grading; Removal or planting of vegetation (except for removal of invasive plant species); or Alteration of any embankment.
Policy ENV-3.2	Creek Contamination and Sedimentation Prevention. Require new development to use site preparation, grading, and construction techniques that prevent contamination and sedimentation of creeks and streams.
Policy ENV-3.3	Creek Bank Stabilization. Require new development proposals to include appropriate measures for creek bank stabilization, and any additional steps necessary to reduce erosion and sedimentation but preserve natural creek channels and riparian vegetation.
Policy ENV-3.4	Stream, Wetland, and Riparian Reclamation. Reclaim degraded streams, wetlands, riparian areas, and wildlife migration corridors, where possible, in cooperation with the Flood Control District, and other local and regional organizations.
Policy ENV-3.5	Reclamation with New Development. Require new development adjacent to creek protection zones to encourage the reclamation of adjacent creeks, wetlands, and riparian areas.
Policy ENV-3.6	Natural Stream Corridor Retention and Improvement . Actively support the use of natural waterways within the city. The City will actively work to avoid any new channelization of creeks and waterways within the city and shall work with regional agencies to restore channelized sections to a more natural channel, where feasible.
Policy ENV-3.7	Erosion Control Plans. Require erosion control plans for new development that require significant grading or are near streams, wetlands, and riparian areas. The plans shall include recommendations for grading practices that prevent erosion, loss of topsoil, and scour of drainageways, consistent with biological and aesthetic values.
Policy ENV-3.8	Educational and Research Access. Work with public and private landowners adjacent to creeks to allow access to creeks, waterways, and riparian areas for educational and research programs.
Policy ENV-3.9	Restoration and Creek Maintenance. Encourage all landowners in the city to remove invasive species, plant native plant species, and prevent pollution from entering local creeks and waterways.
Goal ENV-4	Protect and preserve natural habitat, plants, and wildlife.
Policy ENV-4.1	Minimize Development Impacts. Require new development and construction activities to minimize impacts and disturbances on plants and animals, including sensitive habitat and migration corridors, landforms, and trees.
Policy ENV-4.2	Natural Habitat Protection. Preserve, protect, and improve remaining natural habitats, sensitive habitats for special status species, waterways, and wetlands.
Policy ENV-4.3	Fish Bypass Facilities. Support efforts of the County to determine the feasibility of constructing fish bypass facilities for flood control drop structures in area creeks.
Policy ENV-4.4	Biological Resources Assessment. Require that applicants for development projects proposed to be in or adjacent to critical habitat areas to complete a site-specific biological resources assessment as part of the development review process and modify designs or add mitigations to reduce potential impacts.

ID#	Goals and Supportive Policies/Programs
Policy ENV-4.5	Special Status Species Protection. Cooperate with State and Federal agencies to ensure that new development does not substantially affect any special status species on State or Federal rare, endangered, or threatened species lists.
Policy ENV-4.6	Urban Forestation. Increase urban forestation by promoting urban site design that retains existing trees and includes native species, reducing the urban heat island effect.
Goal ENV-5	Protect cultural and tribal resources.
Policy ENV-5.1	Construction Monitoring. Require new development to monitor grading, ground-disturbing, and other major earth-moving construction activities by a qualified professional during construction in previously undisturbed areas or those with known archaeological resources.
Policy ENV-5.2	Consultation. Perform required consultation with the appropriate tribal organization(s) as part of projects subject to the California Environmental Quality Act (CEQA).
Policy ENV-5.3	Cultural Resources Treatment. Ensure that treatment of any cultural resources discovered during site grading complies with State guidelines.
Goal ENV-6	Maintain designated historic sites and structures.
Policy ENV-6.1	Community Education. Work with the Pleasant Hill Library, community partners, and Pleasant Hill Historical Society to obtain, maintain, and display historical reference materials that provide educational background on the history of Pleasant Hill.
Policy ENV-6.2	Historic Structures. Encourage the maintenance and preservation of historic structures and appropriately designate and protect historic sites and structures.
Goal ENV-7	Meet or exceed State and Federal Air quality standards.
Policy ENV-7.1	Air Quality Improvements. Promote actions that improve air quality and help meet air quality attainment standards.
Policy ENV-7.2	Air Quality Strategies. Work with local and regional agencies to develop a consistent and effective approach to air quality planning and management that includes strategies to reduce vehicle trips, wood burning, and the burning of fossil fuels.
Policy ENV-7.3	Fuel-efficient Vehicles. Require fuel efficiency and cleaner fuels for vehicles, including construction and maintenance equipment, by replacing the City vehicles and equipment with zero-emission vehicles and equipment and requesting that City contractors use reduced- or zero-emission fleets.
Policy ENV-7.4	Landscape Equipment. Prohibit the use of gas-powered landscape equipment and publicize the benefits and importance of alternative technologies.
Policy ENV-7.5	Sensitive Receptors. The City shall require that any new development considered a sensitive receptors (e.g., residential units, schools, medical facilities) proposed within 1,000 feet of I-680 or other major sources of toxic air contaminants prepare an operational health risk assessment. If TAC exposure at new sensitive receptor sites would exceed BAAQMD health risk thresholds, the City shall require mechanical air filtration or other measures be included as part of the project in order to reduce health risk exposure to acceptable levels.
Policy ENV-7.6	Best Management Construction Practices. Require new development to use best management construction practices in accordance with BAAQMD standards.
Goal ENV-8	Become a low carbon community that strives to exceed State GHG reduction goals by 2040.
Policy ENV-8.1	Meet State Emission Reduction Targets. Reduce GHG emissions at a rate that meets the long-term State target to reduce emissions by at least 66 percent below 2005 levels by 2040.
Policy ENV-8.2	Health and Economic Benefits. Prioritize implementation of GHG reduction projects that provide health and economic benefits for the community.
Policy ENV-8.3	Municipal GHG Reduction. Implement cost-effective GHG reduction strategies for City facilities and operations.
Policy ENV-8.4	Land Use and Transportation Priorities. Support land uses and transportation improvements that prioritize alternative transportation modes that will reduce the number and length of automobile trips.

ID#	Goals and Supportive Policies/Programs
Policy ENV-8.5	GHG Thresholds. Require new development projects that would exceed GHG thresholds to feasibly mitigate all GHG emissions and locally offset any remaining GHG emissions that exceed the threshold consistent with the City standards.
Policy ENV-8.6	Electric Vehicle Infrastructure. Require installation of electric vehicle charging stations as a ratio of total required parking for new and redeveloped commercial and multi-family projects and require new single-family residential development to include 220-volt outlets in all garages.
Policy ENV-8.7	Grant Funding. Seek grant funding to support implementation of GHG reduction projects in municipal facilities, including rebates and other incentive opportunities.
Policy ENV-8.8	Preferences for Firms Using Reduced-emissions Equipment. Give preference for City contracts to firms using reduced-emissions equipment, including for services such as trash collection and landscaping.
Policy ENV-8.9	Sustainable Community Facility Design. Encourage the incorporation of sustainable design features in community facilities to reduce energy demand and environmental impacts, such as solar reflective roofing, permeable pavement, and incorporation of shade trees.
Goal ENV-9	Improve efficiency and conservation in all development.
Policy ENV-9.1	Energy Conservation Education. Partner with utility providers to educate residents, employers, and business owners/managers on the energy conservation programs available.
Policy ENV-9.2	Energy Efficiency Improvements. Require energy efficiency improvements, including alternative energy technology, be made as a part of residential and commercial building renovations when a building permit application is submitted to the City.
Policy ENV-9.3	Local Partnerships. Partner with local businesses and organizations to secure grants and incentives that facilitate energy efficiency and renewable energy production.
Policy ENV-9.4	Municipal Buildings Efficiency and Conservation. Require the design new public buildings to exceed State standards for water and energy efficiency.
Policy ENV-9.5	Battery Energy Storage Systems. Encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.
Policy ENV-9.6	Urban Tree Canopy. Encourage discretionary development to include the planting of shade trees on each property and within parking areas to reduce the retention and radiation of heat.
Policy ENV-9.7	Energy-Efficient Lighting . Require public facilities to use energy-efficient lighting technology for outdoor and indoor spaces.
Goal PFS-10	Become a low or zero-waste community with convenient and effective options for recycling, composting, and diverting waste from landfills.
Policy ENV-10.1	Franchise Agreements. Ensure waste franchise agreements and programs offer progressively higher rates of waste diversion with the goal of attaining and eventually exceeding the mandated 75 percent diversion rate.
Policy ENV-10.2	Green Purchasing. Evaluate and implement green purchasing options across all City departments and consider the life cycle effects of purchases.
Policy ENV-10.3	Zero Waste Education. Provide simple zero-waste education programs in City facilities and other organizations and partner with schools to facilitate education programs about recycling, composting, and reusing with standardized zero-waste materials.
Policy ENV-10.4	Composting Equipment. Provide composting equipment at community facilities and events to encourage public and commercial composting.
Policy ENV-10.5	Recycled Building Materials. Encourage new development projects to use recycled building materials where cost-effective and structurally feasible.
Policy ENV-10.6	Building Salvage and Roadway Construction Projects. Require maximization of building salvage and recycling in remodeling or building demolition or roadway reconstruction projects when issuing demolition and encroachment permits.

City of Pleasant Hill Pleasant Hill 2040 General Plan

ID#	Goals and Supportive Policies/Programs
Policy ENV-10.7	Recycling and Waste Diversion. Evaluate recycling and waste diversion opportunities periodically to consider new opportunities to further increase waste diversion.
Policy ENV-10.8	Trash Reduction. Encourage the community to continue meeting the San Francisco Bay Regional Water Control Board Permit Requirements for Trash Reduction.
Policy ENV-10.9	Reduction of Non-Recyclable/Compostable Products. Reduce the amount of non-recyclable waste in the community.
Policy ENV- 10.10	On-Site Facilities in Existing Development. Require the City and encourage commercial businesses and business parks to install recycling and compost receptacles on their premises
Policy ENV- 10.11	Reduce Waste in Operations. Require the City and encourage residents and businesses to reuse products, choose post-consumer recycled content products, reduce packaging waste, and use nontoxic cleaning products to reduce waste and greenhouse gas emissions.
Implementation I	Programs
Program A	Water Conservation Education. Update promotion and educational materials on communitywide water conservation, including but not limited to City website updates and quarterly newsletters advertising regional rebates and programs.
Program B	Water Conservation Programs. Develop and market a program to facilitate the installation of water-conserving equipment or infrastructure beyond that already required by the City or State.
Program C	Public Facility Water Conservation Programs. Prepare and update every five years an action plan for water conservation measures in existing and new public facilities, including using recycled water for public roadways and facility irrigation.
Program D	Water Conservation Ordinance. Review and update every five years, if necessary, the water-efficient landscape standards for consistency with State provisions.
Program E	Development Standards. Review and update every five years, if necessary, the citywide design guidelines to include latest technologies for permeable surfaces, parking lot drainage, and other ways to reduce pollution in urban stormwater runoff.
Program F	Litter and Debris Removal in Creeks. Create a citywide litter and debris removal and cleanup program that aims to address sources of pollution that affect local creeks and waterways by partnering with local groups, organizations, and agencies.
Program G	Erosion Control. Revise and update every five years the Municipal Code as necessary to require best practices that reduce soil erosion and minimize or eliminate the effects of grading on loss of topsoil.
Program H	Creek Restoration Funding. Seek regional, State, and federal funding sources to reclaim, restore, and enhance local creeks and waterways in order to:
	 Reduce embankment erosion and deterioration;
	Clearing debris to maintain free flowing waterways; and Chalific and sections the section of account the
D	Stabilize and restore stream banks through the planting of new vegetation. Planting 5 department of the planting of the
Program I	Planting Education. Provide residents with education and informational sources on invasive plants species to avoid planting, as well as locally native plants appropriate to Contra Costa County and Pleasant Hill.
Program J	Tree Planting and Maintenance Strategy. Prepare and update as necessary the tree planting and maintenance strategy to reduce ambient air temperature on hot sunny days. This plan should be reviewed and updated, as appropriate.
Program K	Tribal Construction Monitors. Require tribal monitor(s) during all activities in areas with cultural resources of interest to local Native American tribes. Both monitors shall observe grading, ground-disturbing, and other earth-moving activities.

ID#	Goals and Supportive Policies/Programs
Program L	Tribal Consultation. Require the determination of the significance of the cultural resource(s) and development and implementation of any data recovery program shall be conducted by a qualified professional and in consultation with interested Native American tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated. The final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes. If Native American tribes do not accept the artifact, it shall be offered to an institution staffed by qualified professionals, as determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.
Program M	Identify Historic and Cultural Sites . Update the historic and cultural resources survey to identify historic or cultural sites eligible for resource protection, with specific consideration of structures 45 years old and older.
Program N	Clean Fleet Program. Research potential funding mechanisms, including grant funding, to prepare and implement a clean fleet program to purchase or lease of zero emission, alternative energy vehicles and equipment with the objective of replacing all fossil fuel vehicles and equipment.
Program O	Climate Action Plan. Prepare a Climate Action Plan that addresses all changes in State law pertaining to climate change and emissions, as well as setting GHG threshold targets for the City.
Program P	GHG Reduction and Source Alignment. Pursue a diverse mix of GHG reduction strategies across a range of municipal activities that generate GHG emissions and perform municipal GHG inventories at least once every five years to track results for implementation elsewhere.
Program Q	Electric Vehicle Parking Regulations. Revise and update the Zoning Ordinance Parking regulations, as needed, to reflect current best practices for electric vehicle charging considering new state legislation banning combustion engine vehicle by 2035.
Program R	Energy Conservation Education. Create a program to educate, provide access to a clearinghouse of available grants, and other funding sources to promote energy conservation and the application of alternative energy technology.
Program S	Zero Waste. Prepare and update as necessary a zero-waste action plan to maximize waste diversion.
Program T	Recycled and Salvaged Building Materials. Create educational information for distribution to development project applicants on the use of recycled materials in new development projects and roadway projects.
Program U	Ban of Non-Recyclable/Compostable Materials. Develop an ordinance to ban the use of styrofoam, plastics straws, and other petroleum-based, non-recyclable, or non-compostable materials used for food and beverage services, including to-go and delivery items.
Source: Pleasant Hill	, City of. 2022. Pleasant Hill Draft 2040 General Plan Environment Element.

Open Space, Parks, and Recreation Element

The Open Space, Parks, and Recreation Element, another component of the current General Plan, would also be updated. The purpose of the Open Space, Parks, and Recreation Element is to provide for the continued enhancement of parks and recreation facilities to meet the recreational needs of existing and future residents, as well as ensure the City meets its General Plan proposed standard of providing three acres of developed parkland per 1,000 residents.

PROPOSED OPEN SPACE, PARKS, AND RECREATION ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Open Space, Parks, and Recreation Element are shown in Table 2-9.

Table 2-9 Pleasant Hill Open Space, Parks, and Recreation Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Goal OSP-1	Preserve, enhance, and protect a continuous system of open space areas, hillsides, and natural features.
Policy OSP-1.1	Open Space Preservation. Keep open space and undeveloped hillsides free of future development.
Policy OSP-1.2	Regional Coordination. Encourage and coordinate with Contra Costa County, the Pleasant Hill Recreation and Park District, and organizations like the East Bay Regional Park District, Contra Costa Water District, and John Muir Land Trust in the preservation of open space resources within and surrounding the city.
Policy OSP-1.3	Access to Open Space Resources. Ensure that the public has equitable access to all parts of the City to experience and appreciate open space resources.
Policy OSP-1.4	Connected Open Space Areas. Integrate, wherever possible, the local open space and parks systems with the open space systems of nearby communities and the region to create and preserve a continuous and connected system of open space areas.
Goal OSP-2	Support the Pleasant Hill Recreation and Park District's efforts to offer high-quality park, recreation (e.g., sports fields), and trail facilities for residents and visitors.
Policy OSP-2.1	Recreation Facilities Planning. Plan for appropriate sites for new recreational facilities, including playing fields, tennis courts, and other facilities.
Policy OSP-2.2	Recreational Programs for All. Advocate for and support PHRPD in their efforts to provide a wide range of recreation programs that are appropriate to a wide range of ages (e.g., youths, seniors), interests (e.g., sports, arts), and backgrounds which reflect Pleasant Hill's cultural diversity.
Policy OSP-2.3	Expand Youth Programs. Encourage new and expanded youth recreation and extracurricular educational programs.
Policy OSP-2.4	Accessibility for Persons with Disabilities. Advocate for and support PHRPD in their efforts to provide recreation programs accessible to those with disabilities and strive to improve accessibility of existing recreation programs.
Policy OSP-2.5	Accessibility for Persons of All Income Levels. Advocate for and support PHRPD in their efforts to make all programs available regardless of participants' ability to pay, through scholarships, fee waivers, program cost underwriting, and other available methods.
Policy OSP-2.6	Parkland Standard. Work with the PHRPD to establish and achieve a standard of 3 acres of developed parkland per 1,000 population.
Policy OSP-2.7	Expand Recreation and Park Facilities. Work with the PHRPD in supporting implementation outlined in the 2020 Parks, Facilities & Recreation Master Plan to facilitate development and expansion of recreation and park facilities.
Policy OSP-2.8	Equitable Access to all Parkland. Work with the PHRPD to identify parcels for new parks and open space preservation to ensure all residents have access to parkland within a one-mile radius of their place of residence regardless of socio-economic status
Goal OSP-3	Ensure the provision of a variety of community facilities that are well-maintained and accessible to all residents.
Policy OSP-3.1	Awareness of Facilities. Work with the PHRPD to provide information about available recreational and community facilities and strive to make all residents aware of these facilities and the programs offered in each.
Policy OSP-3.2	Support Facility Needs. Support the community's needs by working with PHRPD to implement the 2020 Parks, Facilities & Recreation Master Plan).
Implementation P	rograms
Program A	Maintain Land Coverage Constraints. Ensure the Zoning Ordinance continues to require aesthetic and land coverage constraints on new land divisions in open space and undeveloped hillside areas.
Program B	Coordination with the Recreation and Park District. Continue to coordinate with the Recreation and Park District on efforts and initiatives taking place in the city.

Public Facilities, Services, and Infrastructure Element

The Public Facilities, Services, and Infrastructure Element, another component of the current General Plan previously included within the Community Development Element, would also be updated. The purpose of the Public Facilities, Services, & Infrastructure Element is to present goals, policies, and programs related to public facilities and community services within City limits. Public facilities provide convenient and efficient services, a sense of identity, and define the visual character of Pleasant Hill.

PROPOSED PUBLIC FACILITIES, SERVICES, AND INFRASTRUCTURE ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Public Facilities, Services, & Infrastructure Element are shown in Table 2-10.

Table 2-10 Pleasant Hill Public Facilities, Services, and Infrastructure Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Goal PFC-1	Ensure adequate water supply to existing and future development.
Policy PFS-1.1	Preserve and Enhance Water Supply. Support the water providers in their efforts to preserve and enhance the water supply.
Policy PFS-1.2	Infrastructure Maintenance. Collaborate with water providers in their efforts to maintain wastewater conveyance, treatment, and disposal infrastructure in good working conditions within the city.
Policy PFS-1.3	Water-Saving Devices. Require the use of water-saving devices (e.g., low flow faucets and shower heads, dual-flush toilets) in new developments and plumbing-related remodels.
Policy PFS-1.4	Reclaimed Water Use. Require new development to incorporate reclaimed water infrastructure into site and landscaping design and facilities in building/home design and business operations as allowed by applicable agency guidelines.
Policy PFS-1.5	Water Services Requirement. Ensure that water services for new developments does not negatively affect service to existing uses.
Policy PFS-1.6	Water Provider Coordination. Coordinate with water providers to ensure that new proposed development can be adequately served by the water supply system prior to approving the development.
Goal PFS-2	Ensure that adequate wastewater facilities and services are available to meet the needs of existing and future development.
Policy PFS-2.1	Infrastructure Maintenance. Collaborate with Central San in their efforts to maintain wastewater conveyance, treatment, and disposal infrastructure in good working conditions within the city.
Policy PFS-2.2	New Development. Coordinate the review of development proposals with Central San to ensure that new development can be adequately served.
Policy PFS-2.3	Wastewater Services Requirement. Ensure that wastewater services for new developments does not negatively affect service to existing uses.
Goal PFS-3	Provide a resilient, sustainable stormwater management system that reduces runoff volume and minimizes flood potential from existing and future development.
Policy PFS-3.1	NPDES Permit Activities. Implement NPDES permit activities in compliance with State and Federal law to prevent stormwater pollution
Policy PFS-3.2	Drainage Facility Maintenance. Collaborate with property owners and the Flood Control District to regularly maintain and provide funding for all drainage facilities to ensure that they continue operating at full carrying capacity.

ID#	Goals and Supportive Policies/Programs
Policy PFS-3.3	Green Infrastructure. Require new developments to install green infrastructure, as required by the permit conditions of the Regional Water Quality Control Board, as part of their natural stormwater drainage systems, including but not limited to pervious pavement, infiltration basins, rain gardens, green roofs, rainwater harvesting systems, and other types of low-impact development (LID).
Policy PFS-3.4	Retrofit for Green Infrastructure. Encourage the retrofit of existing development to include sustainable infrastructure and green building practices.
Goal PFS-4	Continue and improve upon efforts to divert waste from landfills.
Policy PFS-4.1	Sustainable Solid Waste and Recycling Services. Work with contract service provider to advance their sustainability initiatives to increase recovery of key materials and development of regenerative landfills.
Policy PFS-4.2	Waste Reduction Education. Collaborate and partner with local organizations to provide waste reduction education programs to residents and businesses.
Policy PFS-4.3	Recycle and Reuse Building Materials. Require the recycling and reuse of building materials during demolition and construction including roadway projects.
Goal PFS-5	Provide for the current and future energy and telecommunications needs of Pleasant Hill.
Policy PFS-5.1	Provision of Utilities. Work with public, quasi-public, and private utility providers as practicable to provide adequate levels of service to city residents.
Policy PFS-5.2	Coordination with Utility Providers. Coordinate with energy providers in the siting and design of gas and electric facilities to minimize environmental, aesthetic, and safety impacts.
Policy PFS-5.3	Co-Location of Telecommunication Facilities. Encourage compatible co-location of telecommunication facilities and work with service providers to site telecommunications facilities on City-owned property or public rights-of-way.
Policy PFS-5.4	Utility Undergrounding. Require the undergrounding of local-serving utilities in areas of the city undergoing development or significant construction.
Policy PFS-5.5	Telecommunication Technologies. Support the implementation of telecommunication technologies to attract new businesses and meet the changing communication needs of city residents and businesses.
Policy PFS-5.6	Fiber Optic Cable Access. Explore opportunities to expand the city's fiber optic infrastructure.
Policy PFS-5.7	Residential Electric Utility Use. Encourage the use of electric appliances and utility hook-ups in all new residential development.
Goal PFS-6	Provide high-quality public safety and crime reduction services to maintain a safe and secure community.
Policy PFS-6.1	Police Staffing. Maintain Police Department staffing levels in line with community needs.
Policy PFS-6.2	Development Review. Include the Police Department in the review of development proposals to ensure that crime and safety issues are consistently addressed in the review of new development. Such review shall take a comprehensive approach to public safety and promote the implementation of Crime Prevention Through Environmental Design (CPTED) principles, as appropriate.
Policy PFS-6.3	Public Communications. Use a variety of communication methods (e.g., social media, text messaging, television and radio alerts, website postings) to communicate and inform residents and businesses about crimes, investigations, and emergencies.
Goal PFS-7	Continue to uphold police-community trust, engagement, and collaboration.
Policy PFS-7.1	Professional Standards and Training. Promote policing strategies, standards, and training that prioritize de-escalation, awareness of implicit bias, and practices that safeguard individual rights and liberties.
Policy PFS-7.2	Community Engagement. Enhance a community presence beyond policing duties, including, but not limited to, hosting events in neighborhoods and schools.

ID#	Goals and Supportive Policies/Programs
Goal PFS-8	Advocate for high-quality fire emergency response citywide to prevent and minimize injury, loss of life, and property damage.
Policy PFS-8.1	First Response Travel Time. Work with the CCCFPD to ensure that first response travel time is maintained and enhanced where possible.
Policy PFS-8.2	Emergency Response Facilities and Personnel. Work with the CCCFPD to continue to increase the emergency response facilities and personnel necessary to meet residential and employment growth in the city.
Policy PFS-8.3	Fire Safety Requirements for New Developments. Require new development to incorporate adequate emergency water flow, fire resistant design and materials, and evacuation routes.
Policy PFS-8.4	Emergency Vehicle Accessibility. New development shall incorporate necessary emergency vehicle access and not impede the ability of service providers to provide adequate emergency response.
Policy PFS-8.5	Secondary Emergency Access Route Requirement. Require secondary emergency access routes for all areas of the city currently lacking dual access.
Goal PFS-9	Promote excellence in public education.
Policy PFS-9.1	School Contribution. Acknowledge and support the contribution of schools to the socioeconomic health of the city.
Policy PFS-9.2	High-Quality Education. Support the efforts of local educational institutions and school districts to provide high-quality education and facilities
Policy PFS-9.3	Support Qualified Teacher Recruitment. Support public and private schools in teacher recruitment, facilities planning, housing and other key efforts.
Policy PFS-9.4	Support Education/Schools Advisory Committee. Continue to address issues of concern to the Pleasant Hill Schools with the Mount Diablo Unified School District through the City's Education Commission and Education Task Force Commission.
Policy PFS-9.5	Support of School Upgrades. Support upgrading and updating public educational institutions, facilities, additions and improvements.
Policy PFS-9.6	Collection of School Impact Fees. Continue to collect Mt. Diablo Unified School District school impact fees for new residential development.
Policy PFS-9.7	Coordination and Communication. Improve communication and cooperative interaction among all schools (public, private, and charter) and the Recreation and Park District.
Policy PFS-9.8	Physical and Cultural Connections. Establish strong physical and cultural connections between the City, Diablo Valley College, and local schools that result in creative, proactive opportunities for cooperation.
Policy PFS-9.9	Elementary Schools as Community Focal Points. Coordinate with the school districts and Recreation and Park District to use existing educational facilities for social, cultural, and recreational activities.
Goal PFS-10	Ensure access to library facilities and services to meet the educational and informational needs of the community.
Policy PFS-10.1	City Library Facility. Ensure that the City Library facility continues to provide high-quality services and education forums for residents and seeks to serve all members of the community.
Policy PFS-10.2	Library Operating Hours. Support a broad range of operating hours for the community to use the library and associated amenities.
Policy PFS-10.3	Benefits of the Library. Support the library in providing a diverse set of amenities for patrons, programs and events, and access to technological resources.
Policy PFS-10.4	Lifelong Learning. Maintain and develop library programs and services that contribute to the personal education of adults (of all ages) pursuing lifelong learning opportunities.
Implementation	Programs
Program A	Diablo Vista Feasibility Study. Prepare a study to evaluate the long-term feasibility and provision of Diablo Vista (DV) water services in the community.

ID#	Goals and Supportive Policies/Programs
Program B	Capital Improvements Program. When updating the Capital Improvements Program, identify and include the following:
	 Projects that could also support green infrastructure improvements.
	 Street improvements consistent with emergency vehicle access standards.
	 City-sponsored projects necessary to maintain or improve levels of performance.
Program C	Energy Efficiency Public Campaign. Develop a public outreach campaign on the benefits of energy efficiency and what steps residents and businesses can take to be more energy efficient.
Program D	Green Retrofit Program. Seek funding to develop a program that provides financial assistance and informational resources to incentivize homeowners and business owners to retrofit their properties with green infrastructure.
Program E	"Dig Once" Open Trench Requirements. Prepare and maintain a list of utility-related infrastructure needs (e.g., for improved internet technologies) and require the installation of purple pipe and additional utility conduit associated with identified needs in the public rights-of-way when a trench is opened for major utility projects.
Program F	Undergrounding Utilities Study. Prepare a study to analyze varying methods of implementing undergrounding of utilities on a citywide scale.
Program G	Undergrounding Requirements. Prepare an amendment to the Zoning Ordinance that includes criteria for determining when the undergrounding of utilities is required.
Program H	Communications Master Plan. Prepare a Communications Master Plan, which provides a framework to guide the evaluation, planning, implementation, and management of the City's communications infrastructure, including but not limited to outlining the necessary coordination between different government agencies when installing new communications infrastructure.
Program I	Natural Gas Ban Study. Prepare a study to analyze the implementation of a natural gas ban for all new residential development.
Program J	College/University Liaison. Establish a Diablo Valley College liaison to address issues of mutual concern and potential community-wide benefit.
Source: Pleasant H	ill, City of. 2022. Pleasant Hill Draft 2040 General Plan Public Facilities, Services, & Infrastructure Element.

Economics and Economy Element

The Economics and Economy Element, another component of the current General Plan, will also be updated. The Economics and Economy Element includes goals, policies, and programs related to retention and expansion of existing business sectors, as well as diversifying the economy to develop new kinds of businesses in Pleasant Hill.

PROPOSED ECONOMICS AND ECONOMY ELEMENT GOALS, POLICIES, AND PROGRAMS

Goals and supportive policies and programs of the proposed General Plan Economics and Economy Element are shown in Table 2-11.

Table 2-11 Pleasant Hill Economics and Economy Element Goals, Policies, and Programs

ID#	Goals and Supportive Policies/Programs
Topic	
Goal E-1	Promote economic health of the downtown and the city as a whole, particularly through the growth of businesses that generate sales taxes and other revenues for the City.
Policy E-1.1	Mixed-use. Encourage mixed-use development downtown and at other sites where appropriate.
Policy E-1.2	Annexations. Consider annexation of land in the Sphere of Influence when likely to generate positive fiscal benefits to the City and provide open space, housing, or employment opportunities.
Goal E-2	Facilitate additional retail and commercial opportunities that meet local needs.
Policy E-2.1	Uses Along Contra Costa Boulevard. Facilitate the improvement and upgrading of older and outmoded uses along Contra Costa Boulevard, including mixed-use development where feasible.
Policy E-2.2	Mix of Retailers. Support the attraction and development of more local businesses and firms with creative and innovative business concepts in terms of the product sold, shopping experience, and/or the way that the tenant space is used. A mix of local, regional, and national retailers will offer a diversity of product and pricing choices to local residents. Encourage the integration of entertainment and high demand service uses (such as creative studios, consumer-oriented class spaces, and youth attractions) with retail to create attractive shopper environments.
Policy E-2.3	Retail and Restaurant Uses. Encourage quality retail and restaurant uses in strategic locations to support the success of mixed-use developments.
Policy E-2.4	Cultural and Business Activity at Diablo Valley College (DVC). Support DVC's desire to create a hub of entertainment, commerce and education that benefits students, residents and the business community alike.
Goal E-3	Create and maintain a dynamic and diverse economic base.
Policy E-3.1	City Serving Retail and Commercial Growth. Allow for changes to General Plan commercial land use designations provided such changes include effective mitigation of environmental constraints, noise, traffic, and other hazards. Further, in consideration of such changes, the City Council may require the provision of public benefit, including, but not limited to, provision of affordable housing pursuant to the policies in the City's Housing Element; or provision of parkland, trails, or other community or recreation facilities or equivalent funding for development of such facilities; or other appropriate public benefit as determined by the City Council.
Policy E-3.2	Existing Business Support. Support existing businesses and encourage them to expand when appropriate.
Policy E-3.3	New Businesses. Prioritize attraction of new businesses that:
	 are independent and not affiliated with national chains;
	 are innovative and creative in concept in terms of the product being sold and/or the building or space that the business is located within;
	fill unique niches and/or unmet demand;
	 augment needed services and/or existing amenities (including recreation, retail and restaurant uses);
	 generate net fiscal benefits to the City, such as tax revenues;
	 create higher-paying, higher-skill, and/or higher-quality jobs for local residents;
	match the skill levels of the local labor pool;
	 have potential to stimulate other private investment in the city;
	 are compatible with existing infrastructure and the environment;
	support, participate in, and promote civic activities;
	 create minimal negative impact on the surrounding community; and require minimal public investment.
Policy E-3.4	 require minimal public investment. Light Manufacturing. Encourage the location of artisanal consumer goods manufacturing in commercial districts through design standards that permit flexible building design, with onsite retail

ID#	Goals and Supportive Policies/Programs				
Policy E-3.5	Underutilized Parcels. Facilitate appropriate reuse of underutilized parcels.				
Policy E-3.6	Technology Companies. Encourage the location of firms in growing technology sectors, such as biotech, in existing commercial and industrial zones through design standards that achieve appropriate building scale and environmental standards.				
Goal E-4	Enlarge the City's revenue base as necessary to sustain and support the community.				
Policy E-4.1	Revenue Base Impacts. Evaluate and support proposed development to determine whether it would have a positive impact on the City's revenue base.				
Goal E-5	Help local businesses and the City of Pleasant Hill capture visitor dollars that are otherwise lost to the larger regional area, thereby increasing revenue to local businesses and the City.				
Policy E-5.1	Tourism Industry Development. The City shall continue to encourage organizations that promote Pleasant Hill as a visitor destination and work with the local business community to ensure that a full range of visitor services, events, and attractions is available to maximize the economic benefit from this market.				
Goal E-6	Encourage the development and expansion of critical communications and transportation infrastructure.				
Policy E-6.1	Broadband Network. Encourage the expansion of a high-capacity broadband network in Pleasant Hill and other high-capacity internet technologies as they evolve.				
Policy E-6.2	Transportation Systems. Encourage the installation of electric vehicle charging stations, ride sharing hubs, and bike/scooter rental services to support consumer interest in alternative transportation modes. Evaluate the changing needs for parking in commercial and mixed-use districts. Promote expansion of transit services.				
Policy E-6.3	Active Transportation. Promote the use of the City's trail systems to increase pedestrian and bike travel, particularly for local work trips. Develop circulation designs in mixed-use districts, including Downtown, to promote pedestrian access and bike/scooter travel.				
Implementation	on Programs				
Program A	Allowable Office and Hotel Density. Encourage the use of allowable development density for office and hotel development, while preserving areas designated for retail uses.				
Program B	Density Incentives. Create incentives to encourage higher density and/or mixed-use development in the downtown and at other appropriate sites along transit corridors.				
Program C	Downtown Plan Update. Review and update Downtown Plan, as necessary.				
Program D	Cultural & Business Hub at DVC. Support DVC's efforts to create shared use opportunities for the performing arts center and other event venues at DVC. Promote close connections between the business community and the educational resources at DVC.				
Program E	Plan for a Mix of Uses at Key Opportunity Sites. Identify the specific types of mixed-use development that would be appropriate at key opportunity sites. Develop zoning standards that reflect the locational attributes of the sites. In particular, plans should allow for a compatible mix of office, hot retail, entertainment and/or residential uses at the Crossroads and DVC Plaza shopping centers, and should include fiscal implications of any proposed net reduction in the square footage of retail floor space that existed at DVC Plaza in December 2020 so that the new development will provide equivalent or superior fiscal or economic benefits to the City.				
Program F	Additional Non-Residential Uses. Ensure that the City maintains a well-balanced and modern regulatory system that permits additional retail, commercial, entertainment, technology and light industrial uses while mitigating impacts to residential areas, traffic, schools, City services and other environmental conditions.				
Program G	Reuse Opportunity Identification. Identify the reuse potential and feasibility of commercial and light industrial properties that respond to the emerging needs of specific business uses.				
Program H	Work with Key Employers. Work with the Pleasant Hill Chamber of Commerce and the Downtown Pleasant Hill Shopping Center owner and/or property manager on issues that may impact businesses' decisions to remain in the city.				

ID#	Goals and Supportive Policies/Programs
Program I	Identify Opportunities to Attract New Employers. Work with real estate and development professionals, as well as workforce development agencies such as DVC, to identify opportunities to bring employers into the city that will diversify the job base. Collaborate with regional economic development entities to support economic growth throughout Contra Costa County.
Program J	Promote City Assets and Visitor Attractions. Encourage the efforts of the Pleasant Hill Chamber of Commerce, Stay Pleasant Hill Tourism Improvement District, DVC, and any future programs or organizations that market and promote the city's businesses, city amenities, visitor attractions, ease of access, affordability, and quality of life. Create and maintain an Opportunity Site Map to illustrate key development opportunities.
Program K	Support Job-training Programs. Support the efforts of DVC, Cal State East Bay, and other regional educational institutions to tailor job-training programs to local businesses (including technology, service, retail, finance, insurance, real estate, local government, education, and transportation).
Program L	Periodic Sales Analysis. Analyze periodically city per capita sales by market category (as compared to statewide averages) to identify trends and sectors that should be targeted for growth.
Program M	Broadband Network. Consider support of local internet service providers, educational and health care agencies, and business groups seeking to address network gaps as they are identified. Seek available state and federal grants where appropriate to close any broadband service gaps.
Program N	Electric Vehicle and Micromobility Charging Stations. Develop a plan for the location and development of publicly available charging stations for autos and other types of personal electric transportation.

2.6 Construction

Given the programmatic nature of the 2040 General Plan, specific projects details and locations that could result in the future within these land use areas are unknown at this time. All future projects would require project-level environmental review analysis.

2.7 Required Actions and Approvals

Implementation of the proposed plan would require the following approvals:

- EIR Certification: City Council
- Adoption of 2040 General Plan: City Council

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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3 Environmental Impact Analysis

This chapter sets forth the physical and regulatory environmental setting and addresses the environmental impacts of the General Plan Update (proposed plan) with respect to 13 environmental resource areas. The discussions of the environmental setting in each subsequent section of this Environmental Impact Report (EIR) describe the present physical conditions, or baseline conditions, in the General Plan area (plan area). The baseline used for the analysis of environmental impacts under the California Environmental Quality Act (CEQA) reflects the conditions present at the time the Notice of Preparation (NOP) for this EIR, published on July 7, 2022. The potential impacts of the proposed plan are compared against the existing baseline conditions for each environmental resource.

Environmental Topics Addressed in this EIR

The proposed plan is analyzed in this EIR from the perspective of the following 13 environmental topics:

- Aesthetics
- Air Quality
- Biological, Agriculture, and Forestry Resources
- Cultural and Tribal Cultural Resources
- Geology, Soils, and Mineral Resources
- Greenhouse Gas Emissions and Energy

- Hazards, Hazardous Materials, and Wildfire
- Hydrology and Water Quality
- Land Use Planning, Population, and Housing
- Noise
- Public Services and Recreation
- Transportation
- Utilities and Service Systems

Format of the Environmental Analysis

Each environmental resource area is analyzed in individual sections that include the subsections summarized below.

Introduction

This subsection summarizes what will be discussed in the respective environmental topic section, states what informational documents are used as the basis for the section, and indicates what related comments, if any, were received during the EIR public scoping period.

Environmental Setting

This subsection describes the existing, baseline physical conditions of the plan area and surroundings (e.g., existing land uses, transportation conditions, noise environment) with respect to each resource topic at the time the NOP was issued. Conditions are described in sufficient detail and breadth to allow a general understanding of the environmental impacts associated with implementation of the proposed plan.

Regulatory Framework

This subsection describes the relevant federal, California, regional, and local regulatory requirements that are directly applicable to the environmental topic being analyzed.

Pleasant Hill 2040 General Plan

Impacts and Mitigation Measures

This subsection evaluates the potential for the implementation of the proposed plan to result in direct and indirect adverse impacts on the existing physical environment, with consideration of both construction and operation impacts. The significance criteria questions for environmental impacts are listed at the beginning of this subsection, followed by the discussion of the approach to the analysis and specific thresholds of significance that have been applied to evaluate the impacts of the proposed plan.

Indirect impacts are discussed only for those resources for which they have the potential to occur (e.g., population and housing, cultural resources, air quality, and biological resources). Both plan-level and cumulative-level impacts are analyzed. Plan-level impacts could result from actions related to implementation of the proposed plan. Cumulative-level impacts could result from implementation of the proposed plan in combination with other identified cumulative projects. As discussed in "Cumulative Setting" below, the plans and projects listed in Table 3-1, in conjunction with the proposed plan, are considered the cumulative scenario for the analysis of cumulative impacts.

Impacts are analyzed and the respective assessment and findings are provided, applying the following levels of significance:

- **No Impact.** A determination of No Impact is reached if no potential exists for impacts or if the environmental resource does not occur in the plan area or the area of potential impacts.
- Less Than Significant Impact. This determination applies if the impact does not exceed the defined significance criteria or would be eliminated or reduced to a less than significant level through compliance with existing local, state, and federal laws and regulations. No mitigation is required for impacts determined to be less than significant.
- Less Than Significant Impact with Mitigation. This determination applies if the proposed plan would result in a significant impact, exceeding the established significance criteria, but feasible mitigation is available that would reduce the impact to a less than significant level.
- **Significant and Unavoidable Impact.** This determination applies if the proposed plan would result in an adverse impact that exceeds the established significance criteria, and no feasible mitigation is available to reduce the impact to a less than significant level. Therefore, the residual impact would be significant and unavoidable.

Impacts are defined in terms of their context and intensity. Context is related to the uniqueness of a resource; intensity refers to the severity of the impact. Where applicable, best management practices or improvement measures, or both, are incorporated into the proposed plan to limit the potential for a significant impact. Where necessary, mitigation measures are identified for significant impacts to limit the degree or lower the magnitude of the impact; rectify the impact by repairing, rehabilitating, or restoring the affected environment; or compensate for the impact by replacing or providing substitute resources or environments. These impacts conclude with a finding of Less than Significant Impact with Mitigation. Where no mitigation measures are necessary, relevant impacts are concluded to be Less than Significant or to have No Impact.

As part of the impact analysis, mitigation measures are identified, where feasible, for impacts considered significant or potentially significant consistent with CEQA Guidelines Section 15126.4, which states that an EIR "shall describe feasible measures which could minimize significant adverse impacts." CEQA requires that mitigation measures have an essential nexus and be roughly proportional to the significant impact identified in the EIR. The future project sponsors are required

to implement all identified mitigation measures identified in the Final EIR, and the lead agency (in this case, the City of Pleasant Hill) is responsible for overseeing implementation of such mitigation measures.

Impacts are numbered and shown in bold type. The corresponding mitigation measures, where identified, are numbered and indented, and follow the impact statements. Impacts and mitigation measures are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., "LU" for Land Use and Planning). The following abbreviations are used for individual topics:

- Aesthetics (AES)
- Air Quality (AQ)
- Biological, Agriculture, and Forestry Resources (BIO)
- Cultural and Tribal Cultural Resources (CR)
- Geology, Soils, and Mineral Resources (GEO)
- Greenhouse Gas Emissions and Energy (GHG)
- Hazards, Hazardous Materials, and Wildfire (HAZ)
- Hydrology and Water Quality (HYD)
- Land Use Planning, Population, and Housing (LU)
- Noise (NOI)
- Public Services and Recreation (PS)
- Transportation (TRA)
- Utilities and Service Systems (UTL)

Cumulative Impacts

This subsection evaluates the potential for the proposed plan in conjunction with other identified cumulative plans and projects (see Table 3-1) to result in cumulative impacts. The goal of this analysis is to determine whether the overall long-term impacts of all such plans and projects would be cumulatively significant, and to determine whether the proposed plan on its own would cause a "cumulatively considerable" incremental contribution to any such cumulatively significant impacts. To determine whether the overall long-term impacts of all such plan and projects would be cumulatively significant, the analysis generally considers the following:

- The area in which impacts of the proposed plan would be experienced;
- The impacts of the proposed plan that are expected in the area;
- Other past, proposed, and reasonably foreseeable plans and projects that have had or are expected to have impacts in the same area;
- The impacts or expected impacts of these other plans and projects; and
- The overall impact that can be expected if the individual impacts from each plan or project are allowed to accumulate.

"Cumulative impacts" refers to two or more individual impacts that, when considered together, are considerable, or that compound or increase other environmental impacts (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time. If the analysis determines that the potential exists for the proposed plan, taken together with other past, present, and reasonably foreseeable future plans and projects, to

Pleasant Hill 2040 General Plan

result in a significant or adverse cumulative impact, the analysis then determines whether the proposed plan's incremental contribution to any significant cumulative impact is itself significant (i.e., "cumulatively considerable"). The cumulative impact analysis for each individual resource topic is presented in each resource section of this chapter immediately after the description of the direct impacts and identified mitigation measures.

Cumulative Scenario Setting

Table 3-1 lists the relevant plans and larger-scale projects considered in conjunction with the proposed plan for the cumulative impacts environmental analysis that is included at the end of each environmental resource topic section in this EIR.

Table 3-1 Cumulative Plans and Larger-scale Projects List

lable 3-1	Cumulative	e Plans and L	Plans and Larger-scale Projects List Development Net Increase				
Name	Jurisdiction	Land Uses	Units	Non-residential Gross Square Footage	·	Status	
85 Cleaveland Residential	City of Pleasant Hill	Residential	189	-	Pleasant Hill	Approved – unde construction	
401 Taylor Residential	City of Pleasant Hill	Residential	31 + 6 ADUs ¹	-	Pleasant Hill	Approved – under construction	
Oak Park Properties Specific Plan	City of Pleasant Hill	Civic, recreation, residential	34 + 7 ADUs	24,800	Pleasant Hill	Approved – under construction	
Reliez Terraces Residential	City of Pleasant Hill	Residential	17 + 4 ADUs	<u>-</u>	Pleasant Hill	Approved – under construction	
Cambria Hotel	City of Pleasant Hill	Commercial	-	96,000	Pleasant Hill	Approved	
Concord Naval Weapons Station Redevelopment	City of Concord	Residential, commercial, office	Up to 13,000	millions	Concord	Undergoing environmental review	
Lafayette 6 th Cycle Housing Element Update	City of Lafayette	Residential	3,356	-	Lafayette	Undergoing environmental review	
2 nd Revised Draft General Plan 2035	City of Martinez	Commercial, residential, agricultural, open space	2,060	2.8 million	Martinez	Undergoing environmental review	
Clayton Draft Housing Element	City of Clayton	Residential	868	13,000	Clayton	Undergoing environmental review	
2022-2030 Housing Element Update	City of Danville	Residential	2,577	-	Danville	Undergoing environmental review	
Plan Orinda	City of Orinda	Residential, commercial	1,506	-	Orinda	Undergoing environmental review	

			Development Net Increase			e
Name	Jurisdiction	Land Uses	Units	Non-residential Gross Square Footage	Location	Status
Envision Pittsburg 2040 General Plan Update	City of Pittsburg	Residential, commercial, agricultural, open space	15,576	26,089,499	Pittsburg	Undergoing environmental review
Comprehensive Advanced Planning Initiative	City of Moraga	Residential	1,821	-	Moraga	Undergoing environmental review
Contra Costa Centre Transit Village	Contra Costa County	Residential, commercial, office, hotel	2,700	2,400,000	Unincorporated Contra Costa County (proximate to Pleasant Hill/Contra Costa Centre BART Station)	Approved – under construction
Envision Contra Costa 2040	Contra Costa County	Residential, commercial	7,610*	n/a	Unincorporated Contra Costa County	Undergoing environmental review
Plan Bay Area 2050	All Bay Area jurisdictions	Transportation, residential	-	-	All Bay Area jurisdictions	Approved – under implementation

Source: Information compiled by Rincon Consultants in 2022.

^{*} This is the estimated RHNA requirement. As of the date of this document the proposed buildout numbers are not available.

¹ ADUs = Accessory Dwelling Units

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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3.1 Aesthetics

This section describes existing conditions related to visual character, scenic resources, views, and light and glare, as well as the relevant regulatory framework. This section also evaluates potential impacts to aesthetics that could result from implementation of the 2040 General Plan. Information in this section is based on information obtained from the existing (2003) Pleasant Hill General Plan, the California State Scenic Highway System map, and photos taken of the General Plan area.

3.1.1 Environmental Setting

Visual Character

Visual character in the California Environmental Quality Act (CEQA) context is an impartial description of the defining physical features, landscape patterns, and distinctive physical qualities within a landscape. Visual character is informed by the composition of land, vegetation, water, and structure and their relationship (or dominance) to one another, and by prominent elements of form, line, color, and texture that combine to define the composition of views. Visual character-defining resources and features within a landscape may derive from notable landforms, vegetation, land uses, building design and façade treatments, transportation facilities, overhead utility structures and lighting, historic structures or districts, or panoramic open space.

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., General Plan area) is located in the east San Francisco Bay area, 19 miles northeast of San Francisco and seven miles south of the Suisun Bay. The General Plan area boundaries extend from roughly Alhambra Avenue and Taylor Boulevard on the west to roughly Interstate 680 (I-680) and State Route (SR) 242 on the east. Neighboring areas include the City of Martinez to the north, the City of Concord to the north and east, the City of Walnut Creek to the south, and Briones Regional Park to the west. Surrounding natural features include undeveloped hillsides to the west, and Walnut and Grayson Creeks along the eastern portion of Pleasant Hill.

Pleasant Hill is a mostly residential community characterized largely by one and two-story, single-family homes occupying approximately 70 percent of Pleasant Hill's area, such as shown looking south from the intersection of Shelley Drive and Collins Drive in photograph 1 in Figure 3.1-1. Pleasant Hill is largely built out, with a limited amount of undeveloped open space, along with parks, schools, and vacant land, such as open space in the northern portion of Pleasant Hill seen from Paso Nogal Park in photograph 2 in Figure 3.1-1. Multi-family housing is located primarily near the downtown area and in the Chilpancingo and Ellinwood area in the northern and eastern portions of Pleasant Hill, such as the multi-family development looking north from the intersection of Old Quarry Road and Chilpancingo Parkway shown in photograph 3 in Figure 3.1-1.

Commercial development is concentrated along I-680 in the eastern portion of Pleasant Hill, and light industrial areas are located in the northernmost area of Pleasant Hill east of Pacheco Boulevard and in the southeastern corner of the city along Hookston Road. A gateway to Pleasant Hill's downtown commercial area as seen from the intersection of Contra Costa Boulevard and Crescent Drive is shown in photograph 4 in Figure 3.1-1. Most non-residential buildings are contemporary office and industrial styles of architecture, with concrete walls, tinted glass windows, and neutral colors.

Figure 3.1-1 Pleasant Hill Visual Character Representative Photographs



Photograph 1. Photograph of single-family units from intersection of Shelley Drive and Collins Drive looking south



Photograph 3. Photograph of multi-family units from intersection of Chilpancingo Parkway and Old Quarry Road looking north



Photograph 2. Photograph of open space area from Paso Nogal Park looking north



Photograph 4. Photograph of downtown gateway area from intersection of Crescent Drive and Contra Costa Boulevard looking west

Scenic Resources

Most communities identify scenic resources as important visual assets that contribute to community identity. These resources can include landforms, trees, water features, and the built environment insofar as they enhance and define the visual character of a landscape. Scenic resources include natural and open spaces, as well as the built environment, particularly if certain architecture is of historic or artistic value.

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., General Plan area) does not contain any City-designated scenic resources.

Views

Views may be generally described as panoramic views of a large geographic area for which the field of view can be wide and extend into the distance. Associated vantage points provide an orientation from publicly accessible locations. Examples of distinctive views include urban skylines, valleys, mountain ranges, or large bodies of water. Viewshed is a term used to describe a range of resources and their context that relate to what people can see in the foreground, middle ground, and background distances.

Pleasant Hill (General Plan Area)

Viewers recreating, driving, biking, or walking through Pleasant Hill (i.e., General Plan area) might be afforded views of the hills to the west as they visit Pleasant Hill parks and trails or travel through Pleasant Hill. Their exposure would vary based on proximity and ability to see the viewshed. Most buildings within the General Plan area are one to five stories, and views west from Pleasant Hill toward the western hillsides are visible beyond existing residential development. These views are not remarkable in their vividness as dense development prevents expansive vistas, but the hillsides are a notable part of the regional landscape and views, however limited, providing a sense of place and the context of the Diablo Valley.

As summarized in Table 3.1-1, various publicly accessible locations in the General Plan area offer views toward and/or through the General Pan area. Selected viewpoint locations are shown on Figure 3.1-2. Figure 3.1-3 through Figure 3.1-17 demonstrate existing daytime views from the selected viewpoints.

Table 3.1-1 Summary of Viewpoint Locations for Existing General Plan Area Views

Viewpoint Number	View Location Description	Development Focus Area ¹
1	Looking North along Pleasant Hill Road and Mangini Drive	2
2	Looking South along Taylor Boulevard near the end of Mangini Drive	2
3	Looking West from Stonebridge Way	N/A
4	Looking North along Gregory Lane and Pleasant Hill Road	6
5	Looking East along Monument Boulevard and Marcia Drive	9
6	Looking Southeast from Contra Costa Boulevard and Gregory Lane	3
7	Looking Southwest from Contra Costa Boulevard and Woodsworth Lane	5

Pleasant Hill 2040 General Plan

Viewpoint Number	View Location Description	Development Focus Area ¹
8	Looking Southwest from Contra Costa Boulevard and Doray Drive	5
9	Looking North from Contra Costa Boulevard and Ellinwood Drive	5
10	Looking North from Contra Costa Boulevard and Golf Club Road	N/A
11	Looking East from Trail by Grayson Creek south of Cottonwood Drive	N/A
12	Looking West along Contra Costa Canal Trail near Gregory Lane	6
13	Looking East on Iron Horse Regional Trail between Lisa Lane and Monument Boulevard	9
14	Looking North from Contra Costa Canal Trail and Golf Club Road	1
15	Looking South at the Pleasant Hill Library from Oak Park Boulevard	N/A

Source: Information compiled by Rincon in 2022.

Most of the views in Pleasant Hill reflect the visual unity of the built environment and indicate that Pleasant Hill is horizontally built out to its urban limits. However, views along Mangini Drive, such as in Figure 3.1-3 and Figure 3.1-4, are of an open space area currently used for low-intensity agriculture; this is uncommon throughout the remainder of Pleasant Hill. Surrounding this remnant of Pleasant Hill's nineteenth century past as an agricultural community and found throughout Pleasant Hill are sprawling discontinuous roadways lined with detached single-family residences. Few of Pleasant Hill's residential uses contain multi-family residences, which are concentrated in Pleasant Hill's eastern section near I-680, off Ellinwood Drive as shown in Figure 3.1-5.

Along commercial corridors that also serve as vehicle thoroughfares, such as Gregory Lane and Contra Costa Boulevard, are dotted with typical strip malls, which are characterized by large setbacks and parking lots larger in square footage than the commercial buildings themselves. Views onto such commercial frontages are shown in Figure 3.1-6 through Figure 3.1-13. Several multi-use paths serve pedestrians and cyclists in Pleasant Hill, such as the Contra Costa Canal Trail and Iron Horse Regional Trail, from which a user may see roadways, parking lots, or commercial uses through the trees lining the trail, as shown in Figure 3.1-14 through Figure 3.1-16.

Figure 3.1-17 shows one of Pleasant Hill's public/institutional uses, the newly constructed Pleasant Hill Library along Oak Park Boulevard in the southern portion of Pleasant Hill. There are minimal long-range views within Pleasant Hill, but the hills of Briones Regional Park may be visible from publicly accessible location in Pleasant Hill's western sections, such as along Alhambra Avenue or Taylor Boulevard.

¹ Refer to Figure 2-5 in S Chapter 2.0, *Project Description,* for a map of the development focus areas.

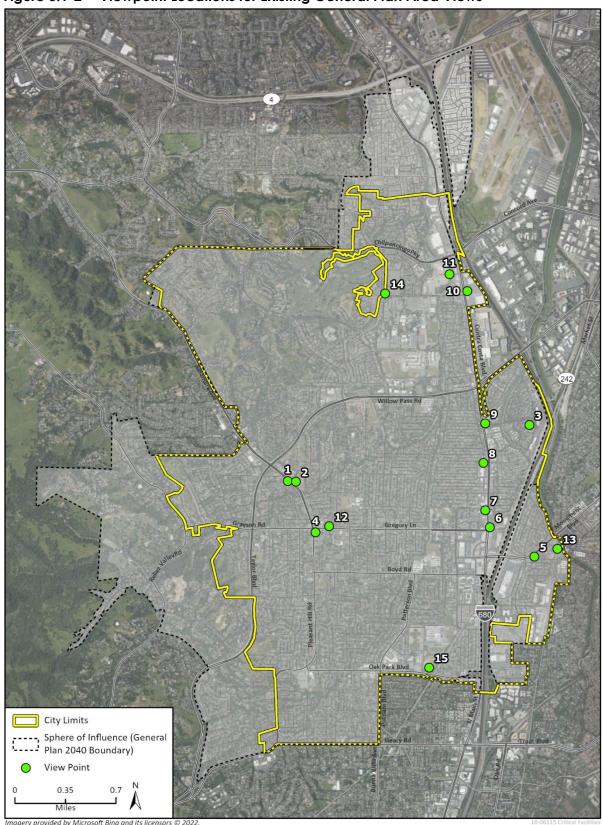


Figure 3.1-2 Viewpoint Locations for Existing General Plan Area Views

Source: Rincon, 2022

Figure 3.1-3 View 1: Looking North along Pleasant Hill Road and Mangini Drive



Figure 3.1-4 View 2: Looking South along Taylor Boulevard near end of Mangini Drive





Figure 3.1-5 View 3: Looking West from Stonebridge Way





Figure 3.1-7 View 5: Looking East along Monument Boulevard and Marcia Drive



Figure 3.1-8 View 6: Looking Southeast from Contra Costa Boulevard and Gregory Lane







Figure 3.1-10 View 8: Looking Southwest from Contra Costa Boulevard and Doray Drive



Figure 3.1-11 View 9: Looking North from Contra Costa Boulevard and Ellinwood Drive

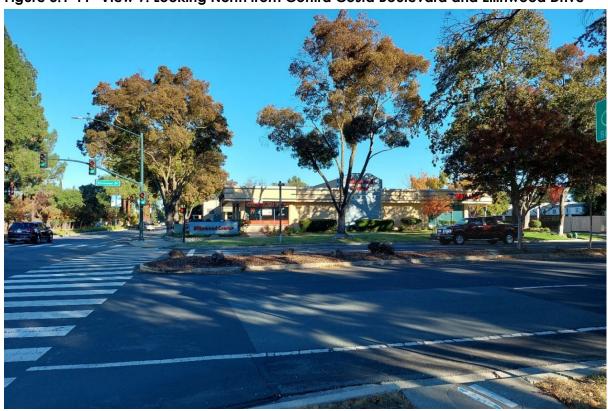


Figure 3.1-12 View 10: Looking North from Contra Costa Boulevard and Golf Club Road







Figure 3.1-14 View 12: Looking West on Contra Costa Canal Trail near Gregory Lane



Figure 3.1-15 View 13: Looking East on Iron Horse Regional Trail between Lisa Lane and Monument Boulevard



Figure 3.1-16 View 14: Looking North from Contra Costa Canal Trail and Golf Club Road





Figure 3.1-17 View 15: Looking South at the Pleasant Hill Library from Oak Park Boulevard

Scenic Highways

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

Pleasant Hill (General Plan Area)

There are no designated State scenic highways within the Pleasant Hill (i.e., General Plan area). The nearest designated State scenic highways to Pleasant Hill are a segment of I-680 and a segment of SR 24, both are located within the City of Walnut Creek. The portion of I-680 that traverses Pleasant Hill is not designated as a State Scenic Highway.1

¹ California Department of Transportation. 2019. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed October 2022).

Light and Glare

In the context of *CEQA Guidelines*, light is nighttime illumination that stimulates sight and makes things visible; glare is difficulty seeing in the presence of bright light such as direct or reflected sunlight.

Pleasant Hill (General Plan Area)

Current light and glare levels within the General Plan area are consistent with urbanized development and include streetlights, exterior building lighting, and lighted signs. Primary sources of light are streetlights, parking lot lights, exterior building lighting, and lighted signs. Automobile headlights can also create temporary sources of light as they exit parking areas. Primary sources of glare include sunlight reflected in the windows of buildings, including glass façades, and the windshields of parked cars.

3.1.2 Regulatory Framework

Federal Regulations

No federal plans, policies, regulations, or laws related to aesthetics are applicable.

State Regulations

California Scenic Highway Program

The State Legislature created the California Scenic Highway Program, maintained by Caltrans, in 1963. The purpose of the State Scenic Highway Program is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been officially designated. The status of a proposed State Scenic Highway changes officially from eligible to officially designated when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a Scenic Highway.

California Code of Regulations Title 24 - Building Lighting Characteristics

California Building Code (California Code of Regulations [CCR], Title 24)—including Title 24, Part 6—includes Section 132 of the Building Energy Efficiency Standards, which regulate lighting characteristics (i.e., maximum power/brightness, shielding, light sensor controls). Different lighting standards are set by classifying areas by lighting zone. The classification is based on 2000 Census population figures. Areas can be designated as LZ1 (dark), LZ2 (rural), or LZ3 (urban). Lighting requirements for dark and rural areas are stricter in order to protect the areas from new sources of light pollution and light trespass. The majority of Pleasant Hill falls under the "urban" standard.

Local Regulations

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to aesthetics, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Municipal Code

TITLE 18 - PLANNING AND LAND USE

Pleasant Hill Municipal Code Title 18, Planning and Land Use, specifies development and design standards, including lighting, density, height, parking, and setback requirements for residential, commercial, retail, office, light industrial, public and semipublic uses within Pleasant Hill.

TITLE 7 - COMMUNITY PRESERVATION ORDINANCE

Pleasant Hill Municipal Code Title 7, Community Preservation, enforces the maintenance of properties to improve the health, safety and welfare of the residents and the image of Pleasant Hill. This includes the maintenance of buildings, structures, vegetation and site conditions on private properties.

TITLE 17 - SUBDIVISIONS

Pleasant Hill Municipal Code Chapter 17.52, Commercial Condominiums, governs commercial condominiums use. Chapter 17.52.040 (D) dictates that a subdivider shall install on-site lighting on all vehicular access ways and major walkways, such that the lighting is directed onto driveways and walkways and shielded to eliminate off-site glare.

3.1.3 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 *CEQA Guidelines* Appendix G significance criteria questions related to Aesthetics.

Would the 2040 General Plan:

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

Approach to Analysis

Aesthetic impact assessments involve qualitative analysis that is subjective but informed by the basic guidelines provided above. Reactions to the same aesthetic conditions vary according to viewer taste and interests. Since the proposed plan is not a concrete development proposal, the analysis focuses on a general discussion of the aesthetic impacts within Pleasant Hill, in terms of the

arrangement of built space to open space, potential loss of scenic resources, degradation of visual character, density and intensity of development, and visual fit with landscape characteristics.

Scenic Vistas and Resources

For the purposes of analysis, a scenic vista is a view from a public place (roadway, designated scenic viewing spot, etc.) that is expansive and considered by the City of Pleasant Hill to be important. It can be obtained from an elevated position (such as from a trail near the top of a hillside) or it can be seen from a roadway with a longer-range view of the landscape. An adverse effect would occur if a proposed development would block or otherwise damage the scenic vista upon implementation.

Visual Character and Views

The impacts on visual character or quality attributable to 2040 General Plan implementation were evaluated relative to visual conditions under buildout, as estimated by existing experiences from public viewpoints in and around Pleasant Hill. Photographs of Pleasant Hill were taken and reviewed in preparation of this analysis. Given that the proposed plan would facilitate development in urbanized areas, ² the impact discussion of visual character and views is focused on consistency with applicable zoning and other regulations governing scenic quality.

Light and Glare

The analysis of light and glare impacts focuses on the nature and magnitude of changes in light and glare conditions associated with implementation of the proposed plan on the General Plan area and surroundings. If the light and glare conditions of the proposed plan and the existing environment are similar, then the visual compatibility would be high. If the light and glare conditions of the proposed plan strongly contrast with the existing light and glare or applicable policies and guidelines, then light and glare compatibility would be low and significant impacts may result. Proposed design standards and guidelines as well as proposed plan goals and policies are applied to determine the significance of light and glare impacts associated with the proposed plan.

EIR Scoping Comments Consideration

No comments relevant to CEQA were received in response to the EIR NOP specific to aesthetics that need to be addressed in the impacts discussion.

Specific Thresholds of Significance

The City of Pleasant Hill has not adopted quantitative thresholds for the evaluation of aesthetics. The City applies the following qualitative thresholds based on adopted policies and guidelines to evaluate the significance of aesthetics impacts resulting from development.

- Block existing views from a scenic route or corridor toward a visual/scenic resource (i.e., ridgeline)
- Be inconsistent with the character of the plan area or existing development in the surrounding area or would substantially alter existing natural topography
- Increase existing nighttime light or daytime glare sources in the plan area or vicinity in a manner that would substantially affect nighttime or daytime views

² Pleasant Hill is in an urbanized area pursuant to *CEQA Guidelines* Section 21071, which states that an incorporated city is urbanized if it has either (1) a population of at least 100,000 persons or (2) has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. Since Pleasant Hill has a population of less than 100,000 persons but a contiguous city (the City of Concord) has a population exceeding 100,000, it is considered urbanized.

Impact Evaluation

Scenic Vistas

Significance Criterion a: Would the proposed plan have a substantial adverse effect on a scenic vista?

Impact AES-1 THE 2040 GENERAL PLAN WOULD FACILITATE DEVELOPMENT IN AREAS ALONG URBANIZED CORRIDORS THAT DO NOT OFFER NOTABLE SCENIC VISTAS THROUGH THE PLAN AREA. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to substantial adverse effects on a scenic vista are limited to operational impacts, because construction impacts would not result in obstructions to scenic vistas. No substantial adverse effects on scenic vistas from construction would result from implementation of the proposed plan.

Operation

Pleasant Hill includes longer range views from public streets from the western neighborhoods westward towards Briones Regional Park across the urbanized landscape of Pleasant Hill. None of these views are designated as "vistas" or "scenic corridors" in the existing (2003) Pleasant Hill General Plan or the proposed 2040 General Plan. Development implemented under the 2040 General Plan would be located along commercial corridors and/or consist of infill development. These areas are highly urbanized with retail, restaurant, commercial, and residential uses no taller than three stories. Publicly available views throughout the General Plan area are largely limited by intervening development, mature landscaping, and large street or median trees.

Development facilitated by the 2040 General Plan would largely be infill, some of which could exceed baseline (2022) building heights. From streets and public places (e.g., parks and trails) in Pleasant Hill, intervening development prevents expansive views of the hills to the west. Views in most of the General Plan area are of the built environment. Views of the natural environment are obscured by development, although views down the streets of the built environment and street trees are intact and create a sense of place.

Since scenic vistas of the hills west of Pleasant Hill are not widely available from public viewing areas and new development would be limited by development standards dictated by Pleasant Hill Municipal Code Title 18, *Planning and Land Use*, scenic vistas would continue to be available where they currently exist. Therefore, impacts of development facilitated by the 2040 General Plan related to scenic vistas would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Scenic Resources within State Scenic Highways

Significance Criterion b: Would the proposed plan substantially damage scenic resources, including

but not limited to, trees, rock outcroppings, and historic buildings within a

State scenic highway?

DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT BE VISIBLE FROM Impact AES-2 DESIGNATED OR ELIGIBLE SCENIC HIGHWAYS. THERE WOULD BE NO IMPACT.

Construction

Impacts related to substantial damage to scenic resources are limited to operational impacts. No respective construction impacts would occur under development facilitated by the proposed plan.

Operation

The closest designated State scenic highways to Pleasant Hill are a segment of I-680 and a segment of SR 24 both located outside of Pleasant Hill within Walnut Creek. The portion of I-680 that traverses Pleasant Hill is not designated as a State Scenic Highway.

The segments of I-680 and SR 24 designated as a State Scenic Highway are located approximately two miles south of the General Plan area's southern border at which point Pleasant Hill is not visible from these freeway alignments. No development would be facilitated by the 2040 General Plan near this State-designated Scenic Highway, and views from such designated State scenic highways do not include the General Plan area. Furthermore, there are no City-designated scenic resources within the General Plan area. Therefore, the 2040 General Plan would result in no operational impact related to effects on scenic resources within a State scenic highway.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

Visual Character or Quality of Public Views

Significance Criterion c: Would the proposed plan, in non-urbanized 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 a publicly accessible vantage point). If the proposed plan is in an urbanized area, would the plan conflict with applicable zoning and other regulations governing scenic quality?

Impact AES-3 INDIVIDUAL PROJECTS FACILITATED BY THE 2040 GENERAL PLAN WOULD ALLOW FOR INCREASED INTENSITY OF DEVELOPMENT ON UNDERUTILIZED SITES. SCENIC QUALITY WOULD BE PROTECTED THROUGH IMPLEMENTATION OF GOALS AND POLICIES IN THE 2040 GENERAL PLAN THAT ADDRESS VISUAL QUALITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to substantial degrading of visual character or quality of public views are limited to operational impacts. In addition, no respective construction impacts resulting in conflicts with zoning and regulations governing scenic quality would occur under development facilitated by the proposed plan.

Operation

Pleasant Hill is largely built out with a mix of single-family residences and commercial uses along corridors such as Gregory Lane and Contra Costa Boulevard. Vacant parcels comprise approximately only two percent of all land within the General Plan area. As such, the 2040 General Plan would facilitate development of new and redeveloped mixed-use (commercial and multi-family residential) land uses within already developed areas of Pleasant Hill. This would largely constitute infill development, including a mix of heights, architectural styles, and open spaces that would increase density and urbanization. Land use and zoning changes are proposed under the 2040 General Plan that would allow increased residential densities near commercial uses. Throughout the 2040 General Plan, residential and commercial design policies are included that address building massing, transitions, scale, orientation, and exterior building materials.

Development implemented under the 2040 General Plan would be infill development in an urbanized area that would be required to conform with visual resource goals and policies that the 2040 General Plan proposes. The 2040 General Plan would allow for an increase in height and density but would also require that all future projects conform to policies that ensure high-quality architectural and site design that would create a sense of place and increase visual quality and unity throughout the entire General Plan area. The following 2040 General Plan goals and policies related to visual character and quality would reduce impacts:

Goal LU-1 Promote a city image that reflects the community's diversity, inclusivity, forward-thinking, and high quality of life.

Policy LU-1.2 City Image. Continue efforts to define and enhance the City's image by emphasizing the high quality, intergenerational park facilities and recreational opportunities in the city; dedication to education, including the presence of Diablo Valley College and its potential to provide cultural and lifelong learning

- opportunities; and the vital, progressive nature of the city as a diverse residential community and a supportive environment for business.
- **Policy LU-1.3 Well-Defined Street Fronts.** Require new buildings to maintain a street front that creates or maintains a well-defined streetscape.
- **Policy LU-1.4 Gateway Features.** Enhance key intersections and entries to the city with signs, landscaping, and streetscape features.
- **Policy LU-1.5 Public Amenities/Art.** Require installation of public art, landscaping, and/or other public amenities in conjunction with all new public and private development and major rehabilitation or expansion of existing development.
- **Policy LU-1.6 Transition in Scale.** Require that new development transition appropriately in building scale, height and massing in relation to the physical and visual character of adjoining neighborhoods.
- **Policy LU-1.7 Multi-Story Development.** Require multi-story buildings to incorporate step backs on upper floors to create a more human-scale and comfortable pedestrian environment.
- **Policy LU-1.8 Citywide Beautification.** Promote a clean and attractive city through periodic clean-up and beautification of commercial areas and neighborhoods.
- Goal LU 2 Promote scenic routes and corridors in the city that add to the overall character of the City.
 - **Policy LU-2.1** Scenic Route Setbacks. Enforce setbacks from the right-of-way for scenic routes, in which only landscaping and pedestrian and bicycle routes may be allowed.
 - **Policy LU-2.2** Scenic Route Improvements. Coordinate with the County in planning for scenic route improvements.
- Goal LU 3 To provide a variety of housing types that offer choices for Pleasant Hill residents and create complete, livable neighborhoods.
 - **Policy LU-3.1 Neighborhood Character.** Maintain and enhance the character and quality of existing residential neighborhoods, ensuring adequate public services and facilities maintained by the City such as streets and drainage are provided.
 - **Policy LU-3.6** Aesthetic Enhancement. Encourage aesthetic enhancement of residential areas, while retaining the quality of individual neighborhoods.
- Goal LU 6 Create distinct and identifiable places for future development within Pleasant Hill that enhance community character, prosperity, and civic pride.
 - **Policy LU-6.9** Transition between Surrounding Development. Require development of the Mangini-Delu site to incorporate design and development techniques meant to implement a seamless transition between existing residential neighborhoods and proposed development.
 - **Policy LU-6.14 Downtown Identity.** Continue to reinforce and enhance the identity of Downtown as the commercial, civic, and cultural center of Pleasant Hill.

- **Policy LU-6.27 Pedestrian Oriented Development.** Support the transformation of existing auto-oriented and strip commercial uses into attractive pedestrian-oriented developments that enhance the visual character and interest of the boulevard.
- **Policy LU-6.30 Street Activation.** Encourage active street fronts to create vibrant spaces for the community to congregate, including paseos, courtyards, expanded outdoor dining, expanded sidewalks, and enhanced landscaping.
- **Policy LU-6.32** Commercial Use Design. Support the design of commercial uses on Contra Costa Boulevard that relate to, and reflect uses adjacent to and behind, those uses, with careful attention to design themes common to specific blocks along the boulevard.
- **Policy LU-6.34 Transform Gregory Lane.** Support the transformation of Gregory Lane into an attractive streetscape that includes neighborhood-serving mixed-use with active frontages facing the street, wider sidewalks, expanded bicycle lanes, and consistent landscaping.

Buildout associated with the 2040 General Plan would not conflict with the aforementioned goals and policies. Goal LU-1 coupled with Policies LU-1.2, and LU-1.8 would broadly maintain a quality community atmosphere and image through beautification and a high level of civic, recreational, and cultural opportunities. Policies LU-1.3, LU-1.4, and LU-1.6 would encourage a coherent cityscape through well-defined street fronts, gateway features, and scaled new development (i.e., appropriate transition between adjoining neighborhoods and land uses). Policy LU-1.5 would require installation of public art in new public and private development, which would enhance the visual quality and character of the city. Finally, Policy LU-1.7 would encourage a human-scale community environment (as opposed to vehicle scale), which would improve the urban design of Pleasant Hill.

Goal LU-2 and Policies LU-2.1 and LU-2.2 would promote setbacks and improvements to scenic routes to maintain visual quality around scenic roadways. Goal LU-3 and Policies LU-3.1 and LU-3.6 would improve the aesthetic quality of residential neighborhoods by maintenance of public services and facilities (such as streets and drainages) and encouraging aesthetic enhancement in residential areas

Goal LU-6 and associated policies would aim to create distinct places within Pleasant Hill that enhance community character. Like Policy LU-1.6, Policy LU-6.9 would encourage development specifically on the Mangini-Delu site to seamlessly transition new development between existing residential neighborhoods. Policy LU-6.14 reinforces the identity of Downtown Pleasant Hill through commercial, civic, and cultural continuity, which would maintain the city's visual character. Policy LU-1.7, Policy LU-6.27 supports transformation of auto-oriented and strip commercial uses to attractive pedestrian-oriented development. Specific to segments of Contra Costa Boulevard and Gregory Lane within Pleasant Hill, Policies LU-6.32 and LU-6.34 would support consistency of design themes and transformation into an attractive streetscape, respectively.

2040 General Plan goals and polices would encourage urban design that complements and is consistent with the character of existing neighborhoods and encourages high-quality design throughout the General Plan area. Implementation of these goals and policies would ensure that development facilitated by the 2040 General Plan would be visually compatible with Pleasant Hill's overall form and would improve underutilized parcels through excellent architectural and landscape design. As such, the 2040 General Plan would not conflict with Pleasant Hill regulations governing

visual character or quality. Therefore, 2040 General Plan operational impacts related to visual quality and character would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

New Source of Light or Glare

Significance Criterion d: Would the proposed plan create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Impact AES-4 DEVELOPMENT FACILITATED BY THE PROPOSED PLAN WOULD CREATE NEW SOURCES OF LIGHT OR GLARE THAT COULD ADVERSELY AFFECT DAYTIME OR NIGHTTIME VIEWS IN THE AREA. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Construction

Impacts related to creation of new sources of light and glare that could adversely affect daytime and nighttime views in the area are typically limited to operational impacts. In addition, most construction facilitated by the proposed plan would occur during the daytime, limiting potential for construction-related, temporary nighttime lighting impacts. Construction-related nighttime lighting would be used at future project construction sites only for safety and security purposes and would be directed downward and limited from potential spillover to adjacent areas. As such, construction light and glare impacts related to implementation of the proposed plan would be less than significant.

Operation

Pleasant Hill is an urbanized city with a commensurate degree of light and glare. New development associated with implementation of the 2040 General Plan would, in large part, occur as infill development of unused parcels between existing built sites or development of existing built sites on already developed parcels. New lighting could occur on buildings for safety and in pedestrian walkways, and light could be emitted from interior sources. The main source of glare would likely be from the sun shining on the windows of parked cars associated with uses at the new development or reflective building surfaces or windows.

Development facilitated by the 2040 General Plan would increase lighting and glare in Pleasant Hill. As the 2040 General Plan would facilitate infill development within the General Plan area along major transit corridors like Contra Costa Boulevard and Gregory Lane, such land uses would be designed to encourage alternative forms of transportation, and surface parking lots would be limited or replaced with other forms of parking. When facilities such as parking lots are replaced with buildings, these replacements may reduce nighttime sources of light, because parking lots are often more brightly lit during the nighttime than most buildings. Infill development of underutilized or vacant parcels may result in new light sources, but they would likely be congruous with nearby light sources (e.g., lighting from shop windows or residential windows). Furthermore, as the infill development facilitated by the 2040 General Plan would largely be mixed-use with residential units

on the upper stories and retail stores or services on the ground floor, light from windows at light would be limited to normal business hours for the ground floor and would be filtered or obscured by window coverings in the residential units. Nonetheless, the Pleasant Hill Municipal Code currently does not contain specific regulations that limit light levels, light spillage, or specify lighting standards on new development, except for Pleasant Hill Municipal Code Chapter 17.52.040 (D) regarding commercial condominiums development, and Chapter 18.55.140 regarding parking lots. However, Mitigation Measure AES-1 would require adoption and implementation of lighting standards to maintain ambient lighting levels. Glare would be reduced from commercial condominiums development through compliance with Pleasant Hill Municipal Code Chapter 17.52.040 (D), which dictates that lighting on commercial condominiums be shielded to eliminate off-site glare, and Chapter 18.55.140 (B), which dictates that outdoor parking lot lighting shall be designed to prevent light pollution. Therefore, 2040 General Plan operational light and glare impacts would be less than significant with mitigation.

Mitigation Measures

MITIGATION MEASURE AES-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO PREPARE A CITY LIGHTING STANDARDS STUDY AND IMPLEMENT THE FINDINGS

The City shall revise the General Plan Land Use Element to include a policy that states the following:

The City shall adopt lighting standards intended to maintain ambient lighting levels after preparing a City Lighting Standards study to determine visibility, minimum glare, and minimum spillage standards in relation to other properties or into the sky. Implementation of this policy would encourage, through the regulation of the types, kinds, construction, installation and uses of outdoor electrically powered illuminating devices, lighting practices and systems to conserve energy without decreasing safety, utility, security, and productivity while enhancing nighttime enjoyment of property and night skies.

Level of Significance

Less than significant with mitigation

3.1.4 Cumulative Impacts

The geographic scope of the cumulative aesthetics analysis is the visible areas within and surrounding the General Plan area. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Pleasant Hill and the City of Concord, as well as plans in Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County, and Plan Bay Area 2050, in addition to the proposed plan.

Scenic Vistas, Scenic Resources, and Visual Character

Development facilitated by the proposed plan, in conjunction with other cumulative plans and projects listed in Table 3-1 could result in impacts to scenic vistas, scenic resources, and visual quality, although largely visual quality would improve with development replacement of aging buildings and sparsely landscaped areas. Cumulative plans and projects are anticipated to increase development in areas already developed with other uses. Cumulative plans and projects located in Pleasant Hill, adjacent cities, and Contra Costa County would be required to undergo analysis for impacts related to scenic vistas, scenic resource, and visual quality. These impacts would be

mitigated by design guidelines, regulations, policies, and project-specific mitigation measures, thereby limiting damage to existing scenic resources and enhancing the visual quality of areas where development occurs. Nevertheless, Pleasant Hill's contribution to potential cumulative aesthetic impacts would not be cumulatively considerable. Consequently, future residential development facilitated by cumulative development would not result in significant cumulative environmental impacts in conflict with requirements for preserving scenic vistas, scenic resources in State- or locally designated highways or drives, or visual quality. Therefore, the cumulative impact related to scenic vistas, scenic resources, and visual character would be less than significant.

Light and Glare

Cumulative plans and projects in Pleasant Hill, adjacent cities, and Contra Costa County would be required to undergo analysis for impacts related to light and glare. Such impacts would be mitigated by design guidelines, regulations, policies, and project-specific mitigation measures, thereby limiting damage related to light and glare in and near areas where development occurs. Nevertheless, Pleasant Hill's contribution to potential cumulative aesthetic impacts would not be cumulatively considerable. Consequently, future development facilitated by cumulative plans and projects would not result in significant cumulative environmental impacts in conflict with requirements for limiting the effects of light and glare. Therefore, the cumulative impact related to light and glare would be less than significant.

Overall Level of Cumulative Significance

Less than significant

3.2 Air Quality

3.2.1 Introduction

This section describes existing air quality conditions regionally and within the City of Pleasant Hill as well as the relevant regulatory framework. This section also analyzes the possible impacts related to air quality (specifically with regard to emissions of criteria pollutants and toxic air contaminants) that could result from implementation of the 2040 General Plan. Information included in this section is based partially on the vehicle miles traveled (VMT) data drawn from the Pleasant Hill 2040 General Plan Transportation Impact Analysis (TIA), which is included as Appendix E to this EIR.

3.2.2 Environmental Setting

Regional Climate and Meteorology

Pleasant Hill is located in Contra Costa County and is in the Diablo and San Ramon Valleys region of the San Francisco Bay Area Air Basin (SFBAAB), which is a subregion of the SFBAAB. The SFBAAB includes the counties of San Francisco, Santa Clara, San Mateo, Marin, Napa, Contra Costa, and Alameda, along with the southeast portion of Sonoma County and the southwest portion of Solano County. Contra Costa County is bounded on the west by the San Francisco Bay and Alameda County, on the east by San Joaquin County, on the south by Alameda County, and on the north by Suisun Bay.

The Diablo and San Ramon Valleys subregion lays east of the Coast Range. The Diablo Valley is bordered in the north by the Carquinez Strait and in the south by the San Ramon Valley. The San Ramon Valley extends south from Walnut Creek to Dublin with its southern end opening onto the Amador Valley. The mountains on the west side of the Diablo and San Ramon Valleys block most of the marine air from reaching the valleys. During the daytime, there are two predominant flow patterns: an upvalley flow from the north and a westerly flow (wind from the west) across the lower elevations of the Coast Range. Pollution potential is relatively high in these valleys. On winter evenings, light winds combined with surface-based inversions and terrain that restricts air flow can cause pollutants levels to build up. In the summer months, ozone and ozone precursors are often transported into the valleys from both the central SFBAAB and the Central Valley. Pleasant Hill's meteorology is affected by its inland location and its proximity to the Diablo and San Ramon Valleys.

The average daily temperature in Pleasant Hill (based on meteorology data measured at the Buchanan Field Airport) is 62 degrees Fahrenheit (°F), the average low temperature is 50°F, and the average high temperature is 74°F. The average wind speed is 8.3 miles per hour. 3

In winter, the SFBAAB experiences periods of storminess, moderate-to-strong winds, and periods of stagnation with very light winds. Winter stagnation episodes are characterized by outflow from the

¹ Bay Area Air Quality Management District [BAAQMD]. 2017a. California Environmental Quality Act Air Quality Guidelines. May. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed October 2022).

² Iowa Environmental Mesonet. 2022. CA ASOS Concord/Buchanan Monthly Summaries. N.d.

https://mesonet.agron.iastate.edu/sites/monthlysum.php?station=CCR&network=CA_ASOS (accessed November 2022).

³ Iowa Environmental Mesonet. 2022. CA_ASOS Concord/Buchanan Wind Roses. N.d.

https://mesonet.agron.iastate.edu/sites/windrose.phtml?station=CCR&network=CA_ASOS (accessed November 2022).

Central Valley, nighttime drainage flows in coastal valleys, weak onshore flows in the afternoon, and otherwise light and variable winds.

A primary factor in air quality is the mixing depth (the vertical air column available for dilution of contaminant sources). Generally, the temperature of air decreases with height, creating a gradient from warmer air near the ground to cooler air at elevation. This is caused by most of the sun's energy being converted to sensible heat at the ground, which in turn warms the air at the surface. The warm air rises in the atmosphere, where it expands and cools. Sometimes, however, the temperature of air actually increases with height. This condition is known as temperature inversion, because the temperature profile of the atmosphere is "inverted" from its usual state. Over the SFBAAB, the frequent occurrence of temperature inversions limits mixing depth and, consequently, limits the availability of air for dilution.

Air Pollutant Types, Sources, and Effects

Criteria Air Pollutants

Concentrations of criteria air pollutants are used as indicators of air quality conditions. Air pollutants are termed criteria air pollutants if they are regulated by developing specific public health and welfare-based criteria as the basis for setting permissible levels. According to the United States Environmental Protection Agency (USEPA), criteria air pollutants are ozone, particulate matter equal to or less than 10 microns in diameter (PM_{10}), PM equal to or less than 2.5 microns in diameter ($PM_{2.5}$), nitrogen dioxide (NO_2), carbon monoxide (NO_2), lead, and sulfur dioxide (NO_2). Criteria air pollutants are defined in more detail under Section 3.2.3, Regulatory Framework. Table 3.2-1 provides a summary of the types, sources, and effects of these criteria air pollutants of national and California concern.

Table 3.2-1 Description of Criteria Air Pollutants of National and California Concern

Criteria Air Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO _X), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO _x) are mobile sources (onroad and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.
Particulate matter (PM ₁₀) Particulate matter (PM _{2.5})	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias.

Criteria Air Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
	meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	 Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.
Nitrogen dioxide (NO ₂)	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _X (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _X is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _X can react with compounds to form nitric acid and related small particles and result in PM related health effects.	NO _X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO _X emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extrapulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO ₂)	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO _X) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM ₁₀ .	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Criteria Air	Physical Description and	Sources	Most Relevant Effects from
Pollutant	Properties		Pollutant Exposure
Lead	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead- ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead- based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Sources: Bay Area Air Quality Management District (BAAQMD); California Environmental Protection Agency (Cal/EPA) 2002; California Air Resources Board (CARB); United States Environmental Protection Agency (USEPA); National Toxicology Program

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs) are also used as indicators of air quality conditions. TACs are defined as air pollutants that may cause or contribute to an increase in mortality or serious illness or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at very low concentrations. TACs can cause long-term health effects (such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) or short-term acute affects (such as eye watering, respiratory irritation, runny nose, throat pain, or headaches). For those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which some adverse health impacts are not expected to occur. This contrasts with the criteria pollutants such as NO_2 and carbon dioxide (CO_2) for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards.

TACs are separated into carcinogens and noncarcinogens based on the nature of the physiological effects associated with exposure to a particular TAC. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Cancer risk is typically expressed as excess cancer cases per million exposed individuals, typically over a lifetime exposure or other prolonged duration. For noncarcinogenic substances, there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels may vary depending on the specific pollutant. Acute and chronic exposure to noncarcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to an acceptable reference exposure levels.

To date, the California Air Resources Board (CARB) has designated nearly 200 compounds as TACs. CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risk from TACs can be attributed to a relatively few compounds, the most important being diesel particulate matter (DPM) from diesel-fueled engines. Common TACs of national and California concern include: DPM, volatile organic compounds (VOCs), benzene, asbestos, hydrogen sulfide, sulfates, visibility-reducing particulates, vinyl chloride, and lead. Table 3.2-2 provides a summary of these types, sources, and effects of TACs of national and California concern.

Table 3.2-2 Description of Toxic Air Contaminants of National and California Concern

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Diesel Particulate Matter (DPM)	diesel PM is a source of PM _{2.5} —diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in onroad vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.	Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.
Volatile Organic Compounds (VOCs)	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon— excluding CO, CO ₂ , carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM ₁₀ and lower visibility.	Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.
Benzene	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a "Group A" carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at one to two percent by volume. The primary route of human exposure is through inhalation.	Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Longterm (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.

City of Pleasant Hill Pleasant Hill 2040 General Plan

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Asbestos	Asbestos is the name given to a number of naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite.	Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States.	Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a noncancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present.
Hydrogen Sulfide	Hydrogen sulfide is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.
Sulfates	The sulfate ion is a polyatomic anion with the empirical formula $SO_{\frac{1}{4}}^{2-}$ Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.	 (a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardiopulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.
Visibility- reducing Particles	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter (1 micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal; and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	 Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravates existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.

Toxic Air Contaminant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Vinyl Chloride	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, CARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.
Lead	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Sources: Bay Air Quality Management District (BAAQMD); California Environmental Protection Agency (Cal/EPA); California Air Resources Board (CARB); United States Environmental Protection Agency (USEPA); National Toxicology Program

Air Quality

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature inversions interact with the physical features of the landscape to determine the movement and dispersal of air pollutant emissions and, consequently, their effect on air quality.

Regional Air Quality

The Bay Area Air Quality Management District (BAAQMD) is the regional agency with jurisdiction for regulating air quality within the nine-county SFBAAB, which includes Contra Costa, Alameda, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the western portion of Solano County, and the southern portion of Sonoma County.

AIR POLLUTANT STANDARDS

Air pollutant standards have been identified by USEPA and CARB for the following six criteria air pollutants that affect ambient air quality: ozone, NO₂, CO, SO₂, lead, PM₁₀, and PM_{2.5} These air pollutants are called "criteria air pollutants," because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. California has also established standards for toxic air contaminants such as visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Table 3.2-3 presents the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for these aforementioned air pollutants. California air quality standards are identical to or stricter than federal standards for all

criteria pollutants. It should be noted that there are no State or federal air quality standards for VOCs, benzene, or DPM.

Ambient air pollutant concentrations in the SFBAAB are measured at air quality monitoring stations operated by CARB and BAAQMD. Air quality monitoring stations measure pollutant ground-level concentrations (typically, ten feet above ground level). In general, the SFBAAB experiences low concentrations of most pollutants compared to federal or State standards.

AIR POLLUTANT ATTAINMENT DESIGNATIONS

Both USEPA and CARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. "Attainment" status refers to those regions that are meeting federal and/or State standards for a specified criteria pollutant. "Nonattainment" refers to regions that do not meet federal and/or State standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status for a specified criteria air pollutant. Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM_{2.5} standard is met if the three-year average of the annual average PM_{2.5} concentration is less than or equal to the standard.

The current attainment designations for the SFBAAB are also shown in Table 3.2-3. The SFBAAB is designated as nonattainment for the State ozone, PM₁₀, and PM_{2.5} standards, nonattainment for the national ozone and PM_{2.5} standards, and unclassified for the national PM₁₀ standard.

Table 3.2-3 Federal and State Air Quality Standards and SFBAAB Attainment Status

		California	California Standards		National Standards	
Pollutant	Averaging Time	Concentration	Attainment Status	Concentration	Attainment Status	
Ozone	8 Hour	0.070 ppm	N	0.070 ppm	N	
	1 Hour	0.09 ppm	N			
Carbon Monoxide	8 Hour	9.0 ppm	Α	9 ppm	А	
	1 Hour	20 ppm	Α	35 ppm	Α	
Nitrogen Dioxide	1 Hour	0.18 ppm	Α	0.100 ppm	U	
	Annual Arithmetic Mean	0.030 ppm		0.053 ppm	Α	
Sulfur Dioxide	24 Hour	0.04 ppm	Α	0.14 ppm	А	
	1 Hour	0.25 ppm	Α	0.075 ppm	Α	
	Annual Arithmetic Mean			0.030 ppm	Α	
Particulate Matter	Annual Arithmetic Mean	$20 \mu g/m^3$	N			
(PM ₁₀)	24 Hour	$50 \mu g/m^3$	N	150 μ g/m ³	U	
Particulate Matter	Annual Arithmetic Mean	12 μg/m³	N	12 μg/m³	U/A	
- Fine (PM _{2.5})	24 Hour			$35 \mu g/m^3$	N	
Sulfates	24 Hour	25 μg/m³	А			

	Averaging Time	California Standards		National Standards	
Pollutant		Concentration	Attainment Status	Concentration	Attainment Status
Lead	Calendar Quarter			1.5 μg/m³	А
	Rolling 3 Month Average			$0.15 \mu g/m^3$	
	30 Day Average	$1.5 \mu g/m^3$)			Α
Hydrogen Sulfide	1 Hour	0.03 ppm	U		
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm	No information available		
Visibility Reducing particles	8 Hour (10:00 to 18:00 PST)		U		

A=Attainment N=Nonattainment U=Unclassified; mg/m³=milligrams per cubic meter ppm=parts per million, μg/m³=micrograms per cubic meter

Source: BAAQMD. 2017b. Air Quality Standards and Attainment Status. Last Updated January 5, 2017.

https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status (accessed October 2022).

Local control in air quality management is provided by CARB through county-level or regional (multicounty) air districts. CARB establishes Statewide air quality standards and is responsible for control of mobile emission sources, while the local air districts are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins Statewide. The City of Pleasant Hill is located in the SFBAAB, which is under the jurisdiction of BAAQMD.

Existing Local (General Plan Area) Air Quality

The Concord-2975 Treat Boulevard monitoring station at 2975 Treat Boulevard in Concord is the closest monitoring station to Pleasant Hill and is located 1.5 miles east of Pleasant Hill. The Concord-2975 Treat Boulevard monitoring station measures 8-hour ozone, hourly ozone, PM₁₀, PM_{2.5}, and NO₂.

Table 3.2-4 summarizes the representative annual air quality data for the General Plan area over the years 2019 through 2021 at the Concord-2975 Treat Boulevard monitoring stations. As shown in Table 3.2-4, the hourly ozone State standard was exceeded in 2020 and 2021, while the 8-hour federal and State standards were exceeded in in every year from 2019 to 2021. The PM $_{10}$ State standard was exceeded in 2020 and 2021 and the PM $_{10}$ federal standard was exceeded in 2020. The PM $_{2.5}$ federal standard was exceeded in 2020 and 2021. No other air quality standards were exceeded.

⁴ CARB. 2022a. Top 4 Summary: Select Pollutant, Years, & Area. N.d. https://www.arb.ca.gov/adam/topfour/topfour1.php (accessed November 2022).

Table 3.2-4 Ambient Air Quality Monitoring Data

Pollutant	2019	2020	2021
Ozone (ppm), Worst 1-Hour ¹	0.092	0.108	0.096
Number of days of State exceedances (>0.09 ppm)	0	2	1
Ozone (ppm), 8-Hour Average ¹	0.074	0.083	0.077
Number of days of State exceedances (>0.07 ppm)	2	3	1
Number of days of Federal exceedances (>0.07 ppm)	2	3	1
Nitrogen Dioxide, Worst 1-Hour	0.0406	0.0339	0.029
Number of days above CAAQS (>0.180 ppm)	0	0	0
Number of days above CAAQS (>0.180 ppm)	0	0	0
Particulate Matter <10 microns, μg/m³, Worst 24 Hours¹	36.0	167.0	26.0
Number of days above State standard (>50 $\mu g/m^3$)	0	1	2
Number of days above Federal standard (>150 $\mu g/m^3$)	0	1	0
Particulate Matter <2.5 microns, μg/m³, Worst 24 Hours¹	28.2	121.4	43.7
Number of days above Federal standard (>35 $\mu g/m^3$)	0	16	2

ppm = parts per million; μg/m³ = micrograms per cubic meter

Source: CARB 2022a

Note: U.S. EPA 2022 monitoring data has not yet been finalized.

MOBILE EMISSIONS

The primary source of mobile air pollutants (both criteria air pollutant and TACs) in the vicinity of the General Plan area is motor-related vehicle trips associated with the local residential, commercial, institutional, and recreational uses.

STATIONARY EMISSIONS

The primary source of stationary air pollutants (both criteria air pollutant and TACs) in the vicinity of the General Plan area is building-related energy use associated with the local residential, commercial, office, industrial, school, and semi-public and institutional uses. Other sources of stationary emissions include landscape maintenance, and consumer products from residential, institutional, and commercial uses. Within the General Plan area, there are 23 facilities regulated by the BAAQMD.⁵

Air Pollution Sensitive Receptors

Sensitive Receptor Types

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects related to air pollutants exposure than others. Land uses such as residences, schools, day care centers, hospitals, nursing and convalescent homes, and parks are considered to be the most sensitive to poor air quality, because the population groups

¹ Measurements taken from the Concord-2975 Treat Boulevard Station

⁵ BAAQMD. 2022. Interactive Data Maps. Last updated June 9. Available at: https://www.baaqmd.gov/about-air-quality/interactive-data-maps (accessed November 2022).

associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 70 years. BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, day care centers, hospitals, and senior-care facilities.

Sensitive Receptors in General Plan Area

Air pollution sensitive receptors in the General Plan area include single- and multi-family residential land uses, schools, daycares, senior care facilities, and public parks. The commercial and office land uses throughout the General Plan area are not considered air pollution sensitive receptors.

3.2.3 Regulatory Framework

Federal Regulations

Clean Air Act and National Ambient Air Quality Standards

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970, and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. These are particulate matter, ground-level ozone, CO, sulfur oxides, nitrogen oxides, and lead. USEPA calls these pollutants criteria air pollutants, because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards. The federal standards are called NAAQS. The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards.

The federal standards were set to protect public health, including that of sensitive individuals; thus, USEPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal Clean Air Act Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies.

USEPA Emission Standards for New Off-road Equipment

Before 1994, there were no standards to limit the amount of emissions from off-road equipment. In 1994, USEPA established emission standards for hydrocarbons, NO_X, CO, and PM to regulate new pieces of off-road equipment. These emission standards came to be known as Tier 1. Since that time, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by US EPA, as well as by CARB. Each adopted emission standard was phased in over time. New engines built in and after 2015 across all horsepower sizes must meet Tier 4 final emission

standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards.

State Regulations

California Air Quality Control Plan (State Implementation Plan)

A State Implementation Plan (SIP) is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The SIP for California is administered by CARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to CARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards.

California Clean Air Act and California Ambient Air Quality Standards

The California CAA, signed into law in 1988, requires all areas of the State to make incremental progress toward the achievement of the California Ambient Air Quality Standards (CAAQS). CARB is the State air pollution control agency and is a part of CalEPA. CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California, and for implementing the requirements of the California CAA. CARB overseas local district compliance with federal and California laws, approves local air quality plans, submits the State implementation plans to the USEPA, monitors air quality, determines and updates State area designations and maps, and sets emissions standards for new mobile sources and off-road vehicles pursuant to California waiver and authorization requests, consumer products, small utility engines, and fuels.

The California CAA requires CARB to establish ambient air quality standards for California, known as CAAQS. Similar to the NAAQS, CAAQS have been established for criteria pollutants and standards are established for vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In general, the CAAQS are more stringent than the NAAQS on criteria pollutants. The California CAA requires all local air districts to endeavor to make incremental progress toward attaining the CAAQS. The California CAA specifies that local air districts focus attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources as long as the regulations do not infringe on local land use authority.

In 2017, CARB released a technical advisory on reducing air pollution exposure from near high-volume roadways that is a technical supplement to CARB's air quality and Land Use Handbook: A Community Health Perspective. Since the publication of the handbook, research has demonstrated the public health, climate, financial and other benefits of compact, infill development along transportation corridors, and that exposures can be reduced with new strategies. As described in the technical advisory, California has implemented various measures to improve air quality and reduce exposure to roadway vehicle emissions. These include the Diesel Risk Reduction Plan, which

aims to reduce particulate matter emissions from diesel vehicles. The continued electrification of California's vehicle fleet would also reduce $PM_{2.5}$ levels, and ongoing efforts to reduce emissions from cars and trucks and to move vehicles towards "zero emission" alternatives will continue to drive down roadway vehicle pollution.

California Health and Safety Code Section 39655 and California Code of Regulations Title 17 Section 93000 (Substances Identified as Toxic Air Contaminants)

CARB identifies substances as TACs as defined in Health and Safety Code Section 39655 and listed in Title 17, Section 93000 of the California Code of Regulations, "Substances Identified as Toxic Air Contaminants." A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. In general, for those TACs that may cause cancer, there are thresholds set by regulatory agencies below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs for the State of California can be attributed to relatively few compounds, the most important of which is DPM from diesel-fueled engines.

California Low-emission Vehicle Program

CARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, CARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.

California On-Road Heavy-duty Vehicle Program

CARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. CARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

California Airborne Toxics Control Measure for Asbestos

CARB has adopted Airborne Toxics Control Measures for sources that emit a particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology to minimize emissions. In July 2001, CARB approved an Air Toxic Control Measure for construction, grading, quarrying and surface mining operations to minimize

emissions of naturally occurring asbestos. The regulation requires application of best management practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present. Pleasant Hill is located in an area likely to not contain naturally occurring asbestos.

Verified Diesel Emission Control Strategies

USEPA and CARB tiered off-road emission standards only apply to new engines and off-road equipment can last several years. CARB has developed Verified Diesel Emission Control Strategies (VDECS), which are devices, systems, or strategies used to achieve the highest level of pollution control from existing off-road vehicles, to help reduce emissions from existing engines. VDECS are designed primarily for the reduction of diesel PM emissions and have been verified by CARB. There are three levels of VDECS, the most effective of which is the Level 3 VDECS. Tier 4 engines are not required to install VDECS because they already meet the emissions standards for lower tiered equipment with installed controls.

California Diesel Risk Reduction Plan

CARB Diesel Risk Reduction Plan has led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), also known as the Hot Spots Act. To date, CARB has identified more than 21 TACs and has adopted the USEPA list of HAPs as TACs.

Carl Moyer Memorial Air Quality Standards Attainment Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program), a partnership between CARB and local air districts, issues grants to replace or retrofit older engines and equipment with engines and equipment that exceed current regulatory requirements to reduce

air pollution. Money collected through the Carl Moyer Program complements California's regulatory program by providing incentives to effect early or extra emission reductions, especially from emission sources in environmental justice communities and areas disproportionately affected by air pollution. The program has established guidelines and criteria for the funding of emissions reduction projects. Within the SFBAAB, the BAAQMD administers the Carl Moyer Program. The program establishes cost-effectiveness criteria for funding emission reductions projects, which under the final 2017 Carl Moyer Program Guidelines are \$30,000 per weighted ton of NO_X, ROG, and PM.

Regional and Local Regulations

Bay Area Clean Air Plan

The BAAQMD is responsible for assuring that the federal and state ambient air quality standards are attained and maintained in the Bay Area. BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities.

BAAQMD adopted the *Bay Area Clean Air Plan: Spare the Air, Cool the Climate (Bay Area Clean Air Plan)* on April 19, 2017 as an update to the 2010 Clean Air Plan. The 2017 Clean Air Plan, which focuses on protecting public health and the climate, defines an integrated, multi-pollutant control strategy that includes feasible measures to reduce emissions for four categories: ground-level ozone and its precursors, ROG and NO_X; PM (primarily PM_{2.5}, and precursors to secondary PM_{2.5}); TACs, and greenhouse gas emissions. The control measures are categorized based on the economic sector framework and include stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, and water. To protect public health, the control strategy will decrease population exposure to PM and TACs in communities that are most impacted by air pollution with the goal of eliminating disparities in exposure to air pollution between communities. The control strategy will also protect the climate by reducing greenhouse gas emissions and developing a long-range vision of how the Bay Area could look and function in a year 2050 post-carbon economy.

BAAQMD Particulate Matter Plan

To fulfill federal air quality planning requirements, BAAQMD adopted a PM_{2.5} emissions inventory for year 2010 at a public hearing on November 7, 2012. The Bay Area Clean Air Plan also included several measures for reducing PM emissions from stationary sources and wood burning. On January 9, 2013, USEPA issued a final rule determining that the Bay Area has attained the 24-hour PM_{2.5} NAAQS, suspending federal SIP planning requirements for the SFBAAB. Despite this USEPA action, the SFBAAB will continue to be designated as nonattainment for the national 24-hour PM_{2.5} standard until BAAQMD submits a redesignation request and a maintenance plan to USEPA, and USEPA approves the proposed redesignation.

The SFBAAB is in nonattainment for the federal PM₁₀ and federal PM_{2.5} standards. USEPA lowered the 24-hour PM_{2.5} standard from 65 micrograms per cubic meter (μ g/m³) to 35 μ g/m³ in 2006, and designated the Air Basin as nonattainment for the new PM_{2.5} standard effective December 14, 2009.

On December 8, 2011, CARB submitted a "clean data finding" request to USEPA on behalf of the Bay Area. If the clean data finding request is approved, then USEPA guidelines provide that the region can fulfill federal $PM_{2.5}$ SIP requirements by preparing either a redesignation request and a $PM_{2.5}$

maintenance plan, or a "clean data" SIP submittal. Because peak PM_{2.5} levels can vary from year to year based on natural, short-term changes in weather conditions, the BAAQMD believes that it would be premature to submit a redesignation request and PM_{2.5} maintenance plan at this time. Therefore, BAAQMD will prepare a "clean data" SIP to address the required elements, including:

- An emission inventory for primary PM_{2.5}, as well as precursors to secondary PM formation; and
- Amendments to the BAAQMD's New Source Review regulation to address PM_{2.5}.

BAAQMD Regulations

REGULATION 2, RULE 5 (NEW SOURCE REVIEW PERMITTING)

The BAAQMD regulates backup emergency generators, fire pumps, and other sources of TACs through its New Source Review (Regulation 2, Rule 5) permitting process. Although emergency generators are intended to be used only during periods of power outages, monthly testing of each generator is required; however, the BAAQMD limits testing to no more than 50 hours per year. Each emergency generator installed is assumed to meet a minimum of Tier 2 emission standards (before control measures). As part of the permitting process, the BAAQMD limits the excess cancer risk from any facility to no more than 10 per 1-million-population for any permits that are applied for within a 2-year period and would require any source that would result in an excess cancer risk greater than 1 per 1 million to install Best Available Control Technology for Toxics.

REGULATION 8, RULE 3 (ARCHITECTURAL COATINGS)

This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases content in paints and paint solvents. Although this rule does not directly apply to the proposed plan, it does dictate the ROG content of paint available for use during the construction.

REGULATION 8, RULE 15 (EMULSIFIED AND LIQUID ASPHALTS)

Although this rule does not directly apply to the proposed plan, it does dictate the reactive organic gases content of asphalt available for use during the construction through regulating the sale and use of asphalt and limits the ROG content in asphalt.

REGULATION 1, RULE 301 (ODOROUS EMISSIONS)

BAAQMD enforces odor control by helping the public to document a public nuisance. Upon receipt of a complaint, BAAQMD sends an investigator to interview the complainant and to locate the odor source if possible. BAAQMD typically brings a public nuisance court action when there are a substantial number of confirmed odor events within a 24-hour period. An odor source with five or more confirmed complaints per year averaged over 3 years is considered to have a substantial effect on receptors. Several BAAQMD regulations and rules apply to odorous emissions. Regulation 1, Rule 301 is the nuisance provision that states that sources cannot emit air contaminants that cause nuisance to a number of persons. Regulation 7 specifies limits for the discharge of odorous substances where BAAQMD receives complaints from 10 or more complainants within a 90-day period. Among other things, Regulation 7 precludes discharge of an odorous substance that causes the ambient air at or beyond the property line to be odorous after dilution with 4 parts of odor-free air, and specifies maximum limits on the emission of certain odorous compounds.

Plan Bay Area

In October 2021, the Metropolitan Transportation Commission (MTC) approved Plan Bay Area 2050. Plan Bay Area includes integrated land use and transportation strategies for the region and was developed through OneBayArea, a joint initiative between ABAG, BAAQMD, MTC, and the San Francisco Bay Conservation and Development Commission. Plan Bay Area is also considered the Association of Bay Area Governments (ABAG)/MTC Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with SB 743, Plan Bay Area included elements designed to encourage the type of land-use development to meet three primary objectives. First, Roadway Level of Service (LOS) could not be considered an environmental impact under the California Environmental Quality Act (CEQA). Second, it introduced changes to Vehicle Miles Traveled (VMT) per capita as a determinant of environmental impact. Third, the use of VMT as an environmental impact in CEQA is considered a mechanism for achieving State and regional GHG reduction goals. As a regional land use plan, Plan Bay Area aims to reduce per-capita GHG emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods located near transit.

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to air quality, but they would be replaced by the proposed 2040 General Plan.

3.2.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Air Quality.

Would the 2040 General Plan:

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

Approach to Analysis

This analysis uses the BAAQMD May 2017 CEQA Air Quality Guidelines to evaluate air quality.

Construction Criteria Pollutant and TAC Emissions

Construction-related emissions are limited in duration but may still cause adverse air quality impacts. Construction associated with implementation of the proposed plan would generate emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, dump trucks, etc.); ground disturbance during site preparation and grading, which creates fugitive dust; and the application of asphalt, paint, or other oil-based substances.

At this time, the pace, location and duration associated with constructing projects permitted by the proposed plan are not sufficiently detailed to quantify a specific emission impact, and thus it would

be speculative to do so. Rather, construction criteria pollutant and TAC emissions impacts for the 2040 General Plan are discussed qualitatively pursuant to the four significance criteria identified above. The OEHHA recommends evaluating risk exposure from short-term projects (e.g., construction projects) lasting more than two months.

Operation Criteria Pollutant and TAC Emissions

Based on plan-level guidance from the BAAQMD 2017 CEQA Air Quality Guidelines, long-term operational criteria pollutant and TAC emissions associated with implementation of the proposed plan are discussed qualitatively by comparing the proposed plan to the 2017 Clean Air Plan goals, policies, and control measures. In addition, comparing the rate of increase of plan VMT and population is recommended by BAAQMD for determining significance of criteria pollutants. If the proposed plan does not meet either criterion, then impacts would be potentially significant.

Odors

The impact analysis qualitatively evaluates the types of land uses facilitated by the proposed plan to evaluate whether major sources of anticipated odors would be present and, if so, whether those sources would likely generate objectionable odors. Screening distance for potential odor impacts are shown in Table 3.2-5. For a plan level analysis, BAAQMD requires the identification of potential existing and planned location of odor sources and policies to reduce odors.

Table 3.2-5 BAAQMD Odor Screening-level Distances Thresholds

Land Use/Type of Operation	Plan Areas Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles
Source: BAAQMD 2017a	

EIR Scoping Comments Consideration

No comments relevant to CEQA were received in response to the EIR NOP specific to air quality that need to be addressed in the impacts discussion.

Specific Thresholds of Significance

Consistency with Air Quality Plan

The applicable air quality plan is the BAAQMD 2017 Bay Area Clean Air Plan, which identifies measures to:

- Reduce emissions and reduce ambient concentrations of air pollutants; and
- Safeguard public health by reducing exposure to the air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution.

The 2040 General Plan would be consistent with the Bay Area Clean Air Plan if it would support the Clean Air Plan goals, include applicable control measures, and not disrupt or hinder implementation of Clean Air Plan control. Consistency with the Clean Air Plan is the basis for determining whether the proposed plan would conflict with or obstruct implementation of an applicable air quality plan.

Construction Criteria Pollutant and TAC Emissions Thresholds

BAAQMD's May 2017 CEQA Air Quality Guidelines have no plan-level significance thresholds for construction air pollutants emissions. However, they do include the individual project-level thresholds for construction-related and long-term operational emissions of air pollutants. These thresholds represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. Construction emissions associated with plan implementation are discussed qualitatively to evaluate potential air quality impacts.

For health risks associated with TAC and PM_{2.5} emissions, the BAAQMD May 2017 *CEQA Air Quality Guidelines* state a project would result in a significant impact if the any of the following thresholds are exceeded:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient PM_{2.5} increase of > 0.3 µg/m³ annual average

In addition, a project would have a cumulatively considerably impact associated with health risks from TAC and $PM_{2.5}$ emissions if the aggregate total emissions of all past, present, and foreseeable future sources within a 1,000-foot radius of the property line of the source plus the project's contribution exceed any of the following thresholds:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 100.0 in a million;
- Increased non-cancer risk of > 10.0 Hazard Index (Chronic or Acute); or
- Ambient PM_{2.5} increase of > 0.8 μg/m³ annual average

Operational Criteria Pollutant and TAC Emissions Thresholds

BAAQMD's 2017 *CEQA Air Quality Guidelines* contain specific operational plan-level significance thresholds for criteria air pollutants. Plans must show the following over the planning period:

Consistency with current air quality plan control measures

 VMT or vehicle trips (VT) increase is less than or equal to the plan's projected population increase

If a plan can demonstrate consistency with both of these criteria, then impacts are considered less than significant.

The same thresholds listed above for construction health risks from TAC and PM_{2.5} would apply to operation.

Odors

The significance thresholds for odor impacts are qualitative in nature. Specifically, an odor-generating source with five or more confirmed complaints in the new source area per year averaged over three years is considered to have a significant impact on receptors within the screening distances shown above under Approach to Analysis.

Impact Evaluation

Air Quality Management Plans Consistency

Significance Criterion a: Would the proposed plan conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD BE CONSISTENT WITH THE BAAQMD 2017 CLEAN AIR PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction and Operation

2040 GENERAL PLAN

The most recently adopted air quality plan in the SFBAAB is the 2017 Clean Air Plan.⁶ The 2017 Clean Air Plan is a roadmap showing how the San Francisco Bay Area will achieve compliance with the State one-hour ozone standard as expeditiously as practicable, and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The 2017 Clean Air Plan does not include control measures that apply directly to construction and operation of individual development projects. Instead, the control strategy includes stationary-source control measures to be implemented through the BAAQMD regulations; mobile-source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the Metropolitan Transportation Commission (MTC), local governments, transit agencies, and others. The 2017 Clean Air Plan also represents the Bay Area's most recent triennial assessment of the region's strategy to attain the state one-hour ozone standard. In this, the 2017 Clean Air Plan replaces the 2010 Clean Air Plan. Under BAAQMD's methodology, a determination of consistency with *CEQA Guidelines* thresholds should demonstrate that a project:

- Supports the primary goals of the 2017 Clean Air Plan;
- Includes applicable control measures from the 2017 Clean Air Plan; and

⁶ BAAQMD. 2017c. Spare the Air Cool the Climate Final 2017 Clean Air Plan. April. https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en (accessed October 2022).

Does not disrupt or hinder implementation of any 2017 Clean Air Plan control measures.

The following includes a discussion of consistency with these criteria for the 2040 General Plan. The 2017 Clean Air Plan contains 85 control strategies aimed at reducing air pollution and protecting the climate in the Bay Area. For consistency with climate planning efforts at the State level, the control strategies in the 2017 Clean Air Plan are based on the same economic sector framework used by CARB, which encompass stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Table 3.2-6 identifies applicable control measures, discusses 2040 General Plan consistency, and shows corresponding policies from the 2040 General Plan that address the measures.

Table 3.2-6 Clean Air Plan Control Measures Consistency Analysis – 2040 General Plan

Control Measures

Consistency

Transportation

TR2: Trip Reduction Programs. Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans, e.g., general and specific plans, while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.

Consistent: Development of the 2040 General Plan would promote compatible land uses resulting in City residents living and working in closer proximity to each other. Proposed policies such as TS-12.11, TC-13.4, and TC-15.6 emphasize transit for commuter and vehicular trip and VMT reduction for non-residential land uses.

Policy TC-12.11: Commute Information. Promote 511 Contra Costa alternative commute mode materials to encourage reduced reliance on vehicular use.

Policy TC-13.4: Transit for Commuters and Special Needs Populations. Work with transit providers and other regional TDM entities to promote and incentivize use of transit for commuters, seniors, students, and persons with disabilities.

Policy TC-15.6: TDM Measures for Non-Residential Land Uses. Encourage measures to reduce vehicular trips and vehicle-miles travelled (VMT). Examples are the provision of on-site childcare and after-school care facilities, and on-site modular mini-conference rooms for virtual meetings.

TR3: Local and Regional Bus Service. Fund local and regional bus projects, including operations and maintenance.

TR4: Local and Regional Rail Service. Fund local and regional rail service projects, including operations and maintenance.

Consistent. Proposed Goal TC-13 of the Transportation and Circulation Element focuses on reducing congestion and vehicle trips through non-automobile transportation. In particular, the following policies would encourage improved transit access and regional transit connections in Pleasant Hill:

Policy TC-13.1: Bus and Rail Services. Coordinate with local transit providers (i.e., bus, paratransit, and rail service) to provide expanded schedules and services that meet the needs of Pleasant Hill residents.

Policy TC-13.3: Support County Connection Improvements. Support County Connection to improve all types of accessibility and comfort for their facilities and to incorporate intermodal facilities where feasible.

Policy TC-13.4: Transit for Commuters and Special Needs
Populations. Work with transit providers and other regional TDM
entities to promote and incentivize use of transit for commuters,
seniors, students, and persons with disabilities.

Control Measures

TR6: Freeway and Arterial Operations.

Improve the performance and efficiency of freeway and arterial systems through operational improvements, such as implementing the Freeway Performance Initiative, the Freeway Service Patrol and the Arterial Management Program.

TR9: Bicycle and Pedestrian Access and

Facilities. Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.

Consistency

Consistent. Proposed Policy TC-4.2 in the Transportation and Circulation Element calls for the City to develop and improve thoroughfares based on existing and proposed land use patterns and projected demand.

Policy LU-6.50 requires upgrades to the street network on Monument Boulevard to improve overall traffic flow pending approval of a new development.

Consistent: Proposed policies in the 2040 General Plan would support an efficient and safe bicycle and pedestrian system that would improve the connectivity and accessibility throughout Pleasant Hill. Proposed Goal TC-9 from the Transportation and Circulation Element is focused on prioritizing a safe and connected pedestrian network for users of all ages and abilities. Goal TC-11 from the Transportation and Circulation Element focuses on increasing the number of bicycle and pedestrian trips. Proposed policies from the Transportation and Circulation Element listed below would encourage bicycle and pedestrian facilities:

Policy TC-1.2: Multimodal Travel Options. Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.

Policy TC-4.5: Correlation Between Land Use and Transportation. Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.

Policy TC-5.1: Evaluate Multimodal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).

Policy TC-5.3: Mobility Technology Support. Identify and implement technology that supports walking, biking, commuting, and other alternative transportation modes within the City including infrastructure that supports micro mobility use within the City.

Policy TC-9.1: Pedestrian Safety. Maintain and upgrade the City's pedestrian system by installing or upgrading sidewalks, warning devices, crosswalks, and other pedestrian aids where appropriate, including particular consideration for the needs of users of all ages and abilities.

Policy TC-9.2: Pedestrian Connections. Require new development to use best practices in providing pedestrian connections between sites and existing and planned pedestrian facilities, including those identified in the Bicycle and Pedestrian Master Plan and other relevant plans and documents.

Policy TC-9.3: Enhance Pedestrian Crossings. Enhance pedestrian crossings on all arterial and collector roadways.

Policy TC-9.4: Sidewalk Maintenance. Maintain existing sidewalk to meet ADA requirements, including removal or relocation of objects obstructing pedestrian path and installation of wider or detached

Control Measures Consistency

sidewalks with a buffer separation from vehicular traffic, where feasible.

Policy TC-9.5: Sidewalk Guidelines and Standards. Establish sidewalk standards and guidelines for enhancing existing sidewalk and installation of new sidewalks.

Policy TC-9.6: Planning for Pedestrian Improvements. Ensure all planning processes, such as PUD Concept Plans, master plans and specific plans, identify areas where pedestrian improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting, and new street furniture.

Policy TC-9.7: Enhance Street Lighting. Enhance street lighting to provide for better pedestrian safety.

Policy TC-9.8: Sidewalk Improvements. Improve sidewalks to facilitate access by users of all ages and abilities.

Policy TC-9.9: Sidewalk Plan. Create a sidewalk plan that identifies high-priority sidewalk throughout the city and establishes an implementation plan for eliminating the sidewalk gaps and enhancement.

Policy TC-10.1: Prioritize Linkages. Design and maintain a pedestrian system that provides connections between trails and access to roadways and parking.

Policy TC-10.2: Safe and Interconnected Trails. Work with other responsible/owner agencies to ensure the trails system is designed to be safe and interconnected, incorporating on-street connections where needed, designed for pedestrians and/or bicyclists, and consistent with other relevant plans.

Policy TC-11.1: Bicycle and Pedestrian Network. Support a network of safe and comfortable bikeway and pedestrian facilities connecting neighborhoods and destinations in Pleasant Hill and adjacent jurisdictions.

Policy TC-11.2: Street Design. Require street cross-sections to accommodate bicyclists, micro-mobility users, and pedestrians.

Policy TC-11.3: Protected Bicycle Facilities. Consider incorporating protected bicycle and pedestrian facilities in higher density land use areas and along major transportation corridors to the greatest extent feasible.

Policy TC-12.2: Design Standards. Support design upgrades to bicycle and pedestrian facilities to increase connectivity and safety citywide.

Policy TC-12.6: Bike Route Connectivity. Develop and sign a network of bicycle routes that provide connectivity between homes, job centers, schools and other frequently visited destinations.

Policy TC-12.8: Bicycle Parking. Support the expansion of the bicycle parking network in Pleasant Hill.

TR13: Parking Policies. Encourage parking policies and programs in local plans, e.g., reduce minimum parking requirements; limit the supply of off-street parking in transit-oriented areas; unbundle the price of parking spaces; support implementation of demand-based pricing (such as "SF Park") in high-traffic areas.

Consistent: The 2040 General Plan proposes policies that recognize that parking should be balanced with other objectives that encourage transit use, bicycling, and walking. The following policies that support this goal and are relevant to TR13 are included below:

Policy LU-6.36: Parking Management Considerations. Support alternative parking management techniques and development standards for new development on Gregory Lane.

Control Measures

Consistency

Policy LU-6.47: Parking Management Considerations. Support alternative parking management techniques and development standards for new development on Oak Park Boulevard.

Policy TC-4.5: Correlation Between Land Use and Transportation. Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.

Policy ENV-2.3: Limit Parking Areas. Discourage additional parking for any new development unless the developer can demonstrate the need for additional parking.

Policy E-6.2: Transportation Systems. Encourage the installation of electric vehicle charging stations, ride sharing hubs, and bike/scooter rental services to support consumer interest in alternative transportation modes. Evaluate the changing needs for parking in commercial and mixed-use districts. Promote expansion of transit services.

Energy

EN1: Decarbonize Electricity Production.

Engage with PG&E, municipal electric utilities and community choice energy programs (CCEs) to maximize the amount of renewable energy contributing to the production of electricity within the Bay Area as well as electricity imported into the region. Work with local governments to implement local renewable energy programs. Engage with stakeholders including dairy farms, forest managers, water treatment facilities, food processors, public works agencies and waste management to increase use of biomass in electricity production.

Consistent. The focus of proposed Goal 9 of the Environment Element is to improve energy efficiency and energy conservation in development. Relevant policies are as follows:

Policy ENV-9.2: **Energy Efficiency Improvements.** Require energy efficiency improvements, including alternative energy technology, be made as a part of residential and commercial building renovations when a building permit application is submitted to the City.

Policy ENV-9.5: Battery Energy Storage Systems. Encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.

EN2: Decrease Electricity Demand. Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.

Consistent: Goals and policies proposed in the 2040 General Plan would support the City's efforts to conserve various resources that would translate to energy conservation, such as improving water and power conservation. Overarching sustainability strategies to decrease energy demand include encouraging incorporation of green building features contained in the California Green Building Standards Code (CALGreen), Part 11, Title 24, encouraging energy-efficient infrastructure, and designing developments with water efficient landscaping. The following proposed policies would reduce energy demand in Pleasant Hill:

Policy ENV-1.2: Green Building Code. Enforce the Green Building Code to ensure the design, construction, operation, use, and occupancy of new construction and remodeling are subject to contemporary water efficiency standards.

Policy ENV-8.9: Sustainable Community Facility Design. Encourage the incorporation of sustainable design features in community facilities to reduce energy demand and environmental impacts, such as solar reflective roofing, permeable pavement, and incorporation of shade trees.

Control Measures Consistency

Policy ENV-9.2: Energy Efficiency Improvements. Require energy efficiency improvements, including alternative energy technology, be made as a part of residential and commercial building renovations when a building permit application is submitted to the City.

Policy ENV-9.4: Municipal Buildings Efficiency and Conservation. Require the design new public buildings to exceed State standards for water and energy efficiency.

Policy ENV-9.5: Battery Energy Storage Systems. Encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.

Policy ENV-9.7: Energy-Efficient Lighting. Require public facilities to use energy-efficient lighting technology for outdoor and indoor spaces.

Policy PFS-1.3: Water-Saving Devices. Require the use of water-saving devices (e.g., low flow faucets and shower heads, dual flush toilets) in new developments and plumbing-related remodels.

Policy PFS-3.3: Green Infrastructure. Require new developments to install green infrastructure as required by the permit conditions of the Regional Water Quality Control Board, as part of their natural stormwater drainage systems, including but not limited to pervious pavement, infiltration basins, raingardens, green roofs, rainwater harvesting systems, and other types of low impact development (LID).

Buildings

BL1: Green Buildings. Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for on-site renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with ABAG's BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.

Consistent: Implementation of the proposed 2040 General Plan policies would promote green building standards. In addition, future development envisioned under the 2040 General Plan would be required to comply with energy standards of Title 24 that are in effect at the time of construction. The following proposed policies would promote green building standards in Pleasant Hill:

Policy ENV-1.2: Green Building Code. Enforce the Green Building Code to ensure the design, construction, operation, use, and occupancy of new construction and remodeling are subject to contemporary water efficiency standards.

Policy PFS-3.4: Retrofit for Green Infrastructure. Encourage the retrofit of existing development to include sustainable infrastructure and green building practices.

BL2: Decarbonize Buildings. Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural-gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters.

Consistent. The 2040 General Plan proposes the following policies to support the decarbonization of buildings:

Policy ENV 9.2: Energy Efficiency Improvements. Require energy efficiency improvements, including alternative energy technology, be made as a part of residential and commercial building renovations when a building permit application is submitted to the City.

Policy ENV-9.3: Local Partnerships. Partner with local businesses and organizations to secure grants and incentives that facilitate energy efficiency and renewable energy production.

Policy ENV-9.5: Battery Energy Storage Systems. Encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.

Control Measures

Consistency

Waste Management Control Measures

WA4: Recycling and Waste Reduction. Develop or identify and promote model ordinances on community-wide zero waste

goals and recycling of construction and demolition materials in commercial and public construction projects

Consistent. Proposed Goal ENV-10 in the Environment Element includes specific policies to reduce the generation of solid waste and improve recycling capabilities. Proposed Goal PFS-4 in the Public Facilities, Services, and Infrastructure Elements focuses on efforts to divert waste from landfills. Policies include:

Policy ENV-10.1: Franchise Agreements. Ensure waste franchise agreements and programs offer progressively higher rates of waste diversion with the goal of attaining and eventually exceeding the mandated 75 percent diversion rate.

Policy ENV-10.2: Green Purchasing. Evaluate and implement green purchasing options across all City departments and consider the life cycle effects of purchases.

Policy ENV-10.3: Zero Waste Education. Provide simple zero-waste education programs in City facilities and other organizations and partner with schools to facilitate education programs about recycling, composting, and reusing with standardized zero-waste materials.

Policy ENV-10.4: Composting Equipment. Provide composting equipment at community facilities and events to encourage public and commercial composting.

Policy ENV-10.5: Recycled Building Materials. Encourage new development projects to use recycled building materials where cost-effective and structurally feasible.

Policy ENV-10.6: Building Salvage and Roadway Construction

Projects. Require maximization of building salvage and recycling in remodeling or building demolition or roadway reconstruction projects when issuing demolition and encroachment permits.

Policy ENV-10.7: Recycling and Waste Diversion. Evaluate recycling and waste diversion opportunities periodically to consider new opportunities to further increase waste diversion.

Policy ENV-10.8: Trash Reduction. Encourage the community to continue meeting the San Francisco Bay Regional Water Control Board Permit Requirements for Trash Reduction.

Policy ENV-10.9: Reduction of Non-Recyclable/Compostable Products. Reduce the amount of non-recyclable waste in the community.

Policy ENV-10.10: On-Site Facilities in Existing Development. Require the City and encourage commercial businesses and business parks to install recycling and compost receptacles on their premises.

Policy ENV-10.11: Reduce Waste in Operations. Require the City and encourage residents and businesses to reuse products, choose post-consumer recycled content products, reduce packaging waste, and use non-toxic cleaning products to reduce waste and greenhouse gas emissions.

Policy PFS-4.1: Sustainable Solid Waste and Recycling Services.

Work with contract service provider to advance their sustainability initiatives to increase recovery of key materials and development of regenerative landfills.

Policy PFS-4.2: Waste Reduction Education. Collaborate and partner with local organizations to provide waste reduction education programs to residents and businesses.

Policy PFS-4.3: Recycle and Reuse Building Materials. Require the recycling and reuse of building materials during demolition and construction including roadway projects.

Control Measures

Consistency

Water Control Measures

WR2: Support Water Conservation. Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.

Consistent: Goals and policies proposed in the 2040 General Plan would support the City's efforts to conserve water. Goal HS-4 in the Hazards and Safety Element is focused on minimizing the effects of drought by creating an emphasis on routine water conservation. The following 2040 General Plan policies would support water conservation in the City:

Policy ENV-1.3: Commercial and Business Water Conservation. Require new or remodeled commercial and industrial development to make changes that conserve water, to the extent feasible. This could include utilizing efficient plumbing fixtures, installing drought-tolerant and water-wise landscaping, and harvesting rainwater for irrigation.

Policy ENV-1.4: Municipal Water Conservation. Require, where feasible, that City facilities install efficient plumbing fixtures in new construction or renovations, replacing inefficient plumbing fixtures, and installing drought-tolerant and water-wise landscaping to conserve water.

Policy ENV-1.5: Water Conservation in Public Facilities. During construction or renovation of public facilities, institute water conservation measures such as hot-on-demand water faucets, low flush toilets, and low water using appliances.

Policy PFS-1.1: Preserve and Enhance Water Supply. Support the water providers in their efforts to preserve and enhance the water supply.

Policy PFS-1.3: Water-Saving Devices. Require the use of water-saving devices (e.g., low flow faucets and shower heads, dual flush toilets) in new developments and plumbing-related remodels.

Policy PFS-1.4: Reclaimed Water Use. Require new development to incorporate reclaimed water infrastructure into site and landscaping design and facilities in building/home design and business operations as allowed by applicable agency guidelines.

Policy HS-4.1: Municipal Water Conservation. Continue to identify opportunities to upgrade City facilities with water-conserving appliances and using reclaimed water for irrigation, landscaping, and other allowable uses.

Policy HS-4,2: Residential Water Conservation. Implement and maintain cost-effective, citywide water conservation and efficiency programs for all customers through education, rebates, assistance programs, and building requirements.

Policy HS-4.3: Water Conservation Measures. Reduce the amount of water used by development by requiring compliance with adopted water conservation measures.

Note: Only control measures that are applicable to the proposed project are identified.

As indicated in Table 3.2-6, the 2040 General Plan would be consistent with the three criteria for evaluating consistency with the 2017 Clean Air Plan. As such, the 2040 General Plan would not conflict with or obstruct implementation of the applicable air quality plan. Therefore, the impact related to air quality management plan consistency would be less than significant.

City of Pleasant Hill

Pleasant Hill 2040 General Plan

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Less than significant without mitigation

Criteria Air Pollutants Emissions Compared to Air Quality Standards

Significance Criterion b: Would the proposed 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?

Impact AQ-2 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD RESULT IN THE GENERATION OF AIR POLLUTANTS DURING CONSTRUCTION OF INDIVIDUAL PROJECTS, WHICH COULD AFFECT LOCAL AIR QUALITY. IMPLEMENTATION OF THE PROPOSED PLAN WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF OPERATIONAL CRITERIA POLLUTANTS DUE TO OPERATIONAL VMT INCREASE. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Construction

Development facilitated by the 2040 General Plan would involve activities that result in air pollutant emissions. Specifically, construction activities such as demolition, grading, construction worker travel, delivery and hauling of construction supplies and debris, and fuel combustion by on-site construction equipment would generate pollutant emissions. These construction activities would create emissions of dust, fumes, equipment exhaust, and other air contaminants, particularly during site preparation and grading. The extent of daily emissions, particularly ROGs and NO_x emissions, generated by construction equipment, would depend on the quantity of equipment used and the hours of operation for each project. The extent of PM_{2.5} and PM₁₀ emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. Dust emissions can lead to both nuisance and health impacts. According to the 2017 BAAQMD *CEQA Air Quality Guidelines*, PM_{2.5} is the greatest pollutant of concern during construction.⁷

The BAAQMD 2017 CEQA Air Quality Guidelines have no plan-level significance thresholds for construction air pollutant emissions that would apply to the 2040 General Plan. However, the guidelines include project-level thresholds for construction emissions. If an individual project's construction emissions fall below the project-level thresholds, the project's impacts on regional air quality would be individually and cumulatively less than significant. The BAAQMD has also identified feasible fugitive dust control measures for construction activities. These Basic Construction Mitigation Measures are recommended for all projects. In addition, the BAAQMD and CARB have regulations that address the handling of hazardous air pollutants such as lead and asbestos, which could be aerially disbursed during demolition activities. BAAQMD rules and regulations address both the handling and transport of these contaminants. Construction of development envisioned under

⁷ BAAQMD. 2017a. California Environmental Quality Act Air Quality Guidelines. May. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed October 2022).

the project would temporarily increase air pollutant emissions, possibly creating localized areas of unhealthy air pollution concentrations or air quality nuisances.

To promote clean air quality to protect public health and safety and to mitigate adverse air quality impacts, the 2040 General Plan includes Policies ENV-7.1 through ENV-7.4 and Policy ENV-7.6 in the *Environment Element*, which support implementation of feasible measures to reduce construction emissions associated with buildout of the 2040 General Plan. These policies are listed below.

Goal ENV-7 Meet or exceed State and Federal Air quality standards.

- **Policy ENV-7.1** Air Quality Improvements. Promote actions that improve air quality and help meet air quality attainment standards.
- **Policy ENV-7.2 Air Quality Strategies.** Work with local and regional agencies to develop a consistent and effective approach to air quality planning and management that includes strategies to reduce vehicle trips, wood burning, and the burning of fossil fuels.
- **Policy ENV-7.3 Fuel-efficient Vehicles.** Require fuel efficiency and cleaner fuels for vehicles, including construction and maintenance equipment, by replacing the City vehicles and equipment with zero-emission vehicles and equipment and requesting that City contractors use reduced- or zero-emission fleets.
- **Policy ENV-7.4 Landscape Equipment.** Prohibit the use of gas-powered landscape equipment and publicize the benefits and importance of alternative technologies.
- **Policy ENV-7.6 Best Management Construction Practices.** Require new development to use best management construction practices in accordance with BAAQMD standards.

The 2040 General Plan Policy ENV-7.1 promotes actions that would improve air quality to help the region meet air quality attainment standards and Policy ENV-7.2 encourages cooperation with local and regional agencies to develop a consistent and effective approach to air quality planning. Policy ENV-7.3 states that the City will require fuel efficiency and cleaner fuels for vehicles, including construction equipment, and request that City contractors use reduced- or zero-emission fleets. Under Policy ENV 7.4, the use of gas-powered landscape equipment would be prohibited. Policy ENV-7.6 would require new development to use best management construction practices in accordance with BAAQMD standards. These policies would reduce construction criteria pollutant emissions generated by future projects facilitated by the 2040 General Plan.

CONSTRUCTION FUGITIVE DUST

Implementation of Policy ENV-7.6 would require future development projects to use best management construction practices in accordance with BAAQMD standards. Implementation of BAAQMD best management construction practices would require watering exposed surfaces twice a day, covering all haul trucks transporting loose materials, removing visible mud or dirt track-out once a day, limiting vehicle speeds on unpaved roads to 15 miles per hour, completing paving as soon as possible, minimizing idling times, and maintaining and properly tuning all construction equipment during future project-level construction which would reduce fugitive dust emissions from construction activities. With adherence to these 2040 General Plan policies listed above,

cumulative construction criteria pollutant impacts related to fugitive dust and consistency with associated air quality standards would be less than significant.

CONSTRUCTION AIR POLLUTANT EMISSIONS

BAAQMD identifies screening sizes of development projects in the BAAQMD CEQA Guidelines that apply to development projects in Pleasant Hill and throughout BAAQMD's jurisdiction. Development projects that are below the screening size are assumed to have less-than-significant impacts. Development projects that are larger than the screening size are required to demonstrate that the construction phase of the project would not exceed the BAAQMD thresholds of significance, as identified in the BAAQMD CEQA Guidelines. If construction-related criteria air pollutants are determined to have the potential to exceed the BAAQMD thresholds of significance, as identified in the BAAQMD CEQA Guidelines, project applicants would be required to incorporate project-specific mitigation measures to reduce air pollutant emissions (e.g., NOx, ROG, PM₁₀,PM_{2.5}) during construction activities to below the thresholds (e.g., see BAAQMD CEQA Guidelines, Table 8-2, Additional Construction Mitigation Measures Recommended for Projects with Construction Emissions Above the Threshold, or applicable construction mitigation measures subsequently approved by BAAQMD). Therefore, without the preparation of project-specific analysis on a projectby-project basis for development proposals that exceed the BAAQMD screening sizes, construction criteria pollutant emission impacts at the program level are potentially significant. However, implementation of Mitigation Measure AQ-1, described below, would require that projects that exceed the BAAQMD screening sizes to evaluate project-specific construction emissions in conformance with the BAAQMD methodology and to mitigate the impacts to a less-than-significant level if construction-related criteria air pollutants exceed the BAAQMD thresholds of significance. Therefore, 2040 General Plan cumulative construction criteria pollutant impacts related to air pollutant emissions and consistency with associated air quality standards would be less than significant with mitigation.

OVERALL

With implementation of Mitigation Measure AQ-1, overall cumulative construction criteria pollutant emission impacts and consistency with associated air quality standards would be less than significant with mitigation.

Operation

The greatest source of criteria pollutants in Pleasant Hill is and would continue to be from transportation sources, specifically mobile emissions from roadway vehicle volumes. In addition, natural gas usage and area sources (e.g., landscaping and other mechanical equipment and ROG emissions from paint) also contribute to criteria air pollutant emissions in Pleasant Hill. The 2040 General Plan emphasizes reducing VMT on area roadways through emphasizing greater residential density, proximity of residents to jobs and commercial services, and implementation of alternative modes of transportation. The 2040 General Plan policies that support a VMT reduction, and thus a reduction in mobile criteria pollutant emissions, are listed below:

Goal LU-3 To provide a variety of housing types that offer choices for Pleasant Hill residents and create complete, livable neighborhoods.

- **Policy LU-3.2** Connectivity. Encourage new residential and mixed-use development to incorporate design features that promote walking within neighborhoods and citywide.
- **Policy LU-3.2** Neighborhood Access. Ensure that new residential development include safe and convenient pedestrian and bicycle access to existing residential neighborhoods.
- **Policy LU-3.4 Clustering Development.** Encourage new residential development to be clustered to support increased densities, open space, and efficiencies of public facilities and services.
- Goal LU-4 To ensure that commercial and mixed-use development in the city is consistent with the overall community character and serves the existing and future needs of residents and visitors.
 - **Policy LU-4.2 Strip Commercial Conversion.** Encourage existing strip commercial uses to be redeveloped into pedestrian friendly, contemporary shopping environments
 - **Policy LU-4.3** Neighborhood Connectivity. Encourage commercial and mixed-use development to link to adjoining residential neighborhoods by incorporating well-designed and attractive streetscapes with sidewalks, bicycle paths, and street amenities.
 - **Policy LU-4.4 Capture Local Spending.** Encourage the development of a broad range of commercial uses that capture a greater share of local spending and reduce residents' reliance upon travel to nearby communities.
 - Policy LU-4.5 Vertical and Horizontal Mixed-use. Encourage vertical and horizontal mixed-use development at key intersections and within neighborhoods that result in distinct and cohesive pedestrian-oriented places that provide additional neighborhood-serving amenities and intensified economic vitality.
- Goal LU-6 Create distinct and identifiable places for future development within Pleasant Hill that enhance community character, prosperity, and civic pride.
 - **Policy LU-6.4 Enhanced Connectivity.** Support the expansion of alternative transportation options including enhancements to the multi-use trail, expanded bike lanes along Golf Club Road, and additional connections between new and existing development.
 - Policy LU-6.16 Walkable Environment. Enhance the pedestrian connections between Downtown, Crescent Drive, City Hall, and adjacent commercial centers along Contra Costa Boulevard.
 - **Policy LU-6.25 Transit-Oriented Development.** Encourage the design and development of transit-oriented developments along Contra Costa Boulevard to support future transportation system enhancements.
 - **Policy LU-6.27 Pedestrian Oriented Development.** Support the transformation of existing auto-oriented and strip commercial uses into attractive pedestrian-oriented developments that enhance the visual character and interest of the boulevard.

- **Policy LU-6.31** Increased Residential Development. Support increased residential development along Contra Costa Boulevard in the form of either vertical or horizontal mixed-use projects.
- **Policy LU-6.34** Transform Gregory Lane. Support the transformation of Gregory Lane into an attractive streetscape that includes neighborhood-serving mixed-use with active frontages facing the street, wider sidewalks, expanded bicycle lanes, and consistent landscaping.
- **Policy LU-6.37 Pedestrian Friendly Design.** Encourage the expansion of Gregory Lane pedestrian and bicyclist infrastructure to create a more multi-modal friendly environment that increases overall safety.
- **Policy LU-6.48 Pedestrian Connectivity.** Require Monument Boulevard pedestrian upgrades including signalized crossings, bulb outs, and expanded sidewalks.
- **Policy LU-6.53** Increased Residential Development. Support increased residential development along Monument Boulevard in the form of either vertical or horizontal mixed-use projects.
- Goal LU-7 Improve the health and well-being of all Pleasant Hill residents.
 - **Policy LU-7.2** Alternative Transportation Improvements. Support new development and infrastructure improvements in existing neighborhoods that enable and encourage people to drive less and walk, bike, or take public transit more.
 - **Policy LU-7.3 Remove Physical Barriers.** Remove or plan for ways to address physical barriers that bisect neighborhoods and discourage walking or biking.

Land Use Element Implementation Programs

- **Program C Streetscape Improvements.** Install streetscape improvements, pedestrian access elements, and public spaces to areas outside of downtown, and require new development in those areas to incorporate complementary features.
- Program L Pedestrian and Bicycle Barrier Removal. Prepare an analysis of the physical barriers to walking and bicycling throughout the city. Identify options for and prepare a program for barrier removal. The analysis should include improvement prioritization, cost estimates, funding sources, and a timeline for improvements.
- Goal TC-1 Establish and maintain a safe and efficient circulation system that emphasizes the use of existing arterial and collector roadways, paths, and bike lanes.
 - **Policy TC-1.2 Multimodal Travel Options.** Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.

- Goal TC-2 Improve traffic circulation along the city roadway network.
 - **Policy TC-2.6** Safe Routes to School (SR2S). Establish a Safe Routes to School program in collaboration with the school districts and private schools that identifies and promotes suggested routes to school and incentivizes students and parents to use alternative transportation modes for school commutes.
- Goal TC-4 Reduce congestion and vehicle trips through land use planning.
 - **Policy TC-4.4 Infill Development.** Support infill and development in existing urban areas and around key transit facilities.
 - **Policy TC-4.5 Correlation Between Land Use and Transportation.** Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.
- Goal TC-5 Support a vibrant, walkable environment that encourages alternative (non-driving) modes of transportation.
 - Policy TC-5.1 Evaluate Multimodal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).
 - **Policy TC-5.2** Impact Mitigation Costs. Require new development to pay costs necessary to mitigate project impacts on the local and regional transportation system, including establishment of trails and other alternatives to vehicle use as specified in the Capital Improvement Plan and Citywide Bicycle and Pedestrian Master Plan.
 - **Policy TC-5.3 Mobility Technology Support.** Identify and implement technology that supports walking, biking, commuting, and other alternative transportation modes within the City including infrastructure that supports micro mobility use within the City.
- Goal TC-6 Reduce reliance on the automobile by promoting alternative modes of transportation.
 - **Policy TC-6.1 Encourage Non-Driving Forms of Personal Mobility.** Encourage bicycling, walking, and other forms of personal mobility, like e-scooters, e-bikes, and neighborhood electric vehicles, as energy conserving, non-polluting modes of travel.
 - **Policy TC-6.2** Private Development of Transportation Facilities. Encourage private entities to develop and maintain publicly accessible transportation facilities, including transit, pedestrian, and bicycle facilities.

- **Policy TC-6.3** Non-Vehicular Transportation Requirement. Require new developments that would result in significant increases in air pollution, VMT or noise to incorporate non-vehicular facilities or programs that would reduce the overall project impacts on these resources including e-Bike charging stations and free use e-Bike pod stations for residential and commercial development.
- Goal TC-8 Encourage the development of a comprehensive and integrated transportation network with infrastructure and design features that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, youth, and families.
 - **Policy TC-8.1** Complete Streets Principles. Apply complete streets principles when building new, or rehabilitating existing, roadways, consider the following design elements:
 - Sidewalks and curbs as a standard design principle.
 - Bicycle lanes and/or shared lanes as a standard design principle.
 - Transit accessibility as a standard design principle.
 - Shade trees and planting strips as a standard design principle along roadways
 - **Policy TC-8.2 Review for Complete Streets.** Review street reconstruction, new development, and utility projects to incorporate complete street elements when feasible, including trails, bus stop enhancements, and bicycle/pedestrian facilities.
 - **Policy TC-8.3** Regional Complete Streets Planning. Coordinate internally and with other agencies to plan for the provision of complete streets regionally.
 - **Policy TC-8.4 Multi-Modal Roadways.** Consider the needs of vehicles, bicycle, and pedestrians on all city roadways and facilities.
 - **Policy TC-8.6 Wide Sidewalks for Shared Use.** Provide wide sidewalks to allow shared use by pedestrians, bicyclists, and non-motorized modes of transportation as directed by the City Engineer.
 - **Policy TC-8.7 Limit Roadway Widening.** Limit roadway widening and prioritize bicycle and pedestrian facility improvements within the right of way to increase roadway capacity that does not conflict with emergency access requirements.
- Goal TC-9 Prioritize a safe and connected pedestrian network for users of all ages and abilities.
 - **Policy TC-9.1** Pedestrian Safety. Maintain and upgrade the City's pedestrian system by installing or upgrading sidewalks, warning devices, crosswalks, and other pedestrian aids where appropriate, including particular consideration for the needs of users of all ages and abilities.
 - **Policy TC-9.2** Pedestrian Connections. Require new development to use best practices in providing pedestrian connections between sites and existing and planned pedestrian facilities, including those identified in the Bicycle and Pedestrian Master Plan and other relevant plans and documents.

- **Policy TC-9.3 Enhance Pedestrian Crossings.** Enhance pedestrian crossings on all arterial and collector roadways.
- **Policy TC-9.4 Sidewalk Maintenance.** Maintain existing sidewalk to meet ADA requirements, including removal or relocation of objects obstructing pedestrian path and installation of wider or detached sidewalks with a buffer separation from vehicular traffic, where feasible.
- **Policy TC-9.5 Sidewalk Guidelines and Standards.** Establish sidewalk standards and guidelines for enhancing existing sidewalk and installation of new sidewalks.
- Policy TC-9.6 Planning for Pedestrian Improvements. Ensure all planning processes, such as PUD Concept Plans, master plans and specific plans, identify areas where pedestrian improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting, and new street furniture.
- **Policy TC-9.7 Enhance Street Lighting.** Enhance street lighting to provide for better pedestrian safety.
- **Policy TC-9.8 Sidewalk Improvements.** Improve sidewalks to facilitate access by users of all ages and abilities.
- **Policy TC-9.9 Sidewalk Plan.** Create a sidewalk plan that identifies high-priority sidewalk throughout the city and establishes an implementation plan for eliminating the sidewalk gaps and enhancement.
- Goal TC-10 Provide well-designed and well-maintained off-street paths and trails.
 - **Policy TC-10.1 Prioritize Linkages.** Design and maintain a pedestrian system that provides connections between trails and access to roadways and parking.
- Goal TC-11 Increase the number of bicycle and pedestrian trips by users of all ages and abilities.
 - **Policy TC-11.1 Bicycle and Pedestrian Network.** Support a network of safe and comfortable bikeway and pedestrian facilities connecting neighborhoods and destinations in Pleasant Hill and adjacent jurisdictions.
 - **Policy TC-11.2 Street Design.** Require street cross-sections to accommodate bicyclists, micromobility users, and pedestrians.
 - **Policy TC-11.3** Protected Bicycle Facilities. Consider incorporating protected bicycle and pedestrian facilities in higher density land use areas and along major transportation corridors to the greatest extent feasible.
- Goal TC-12 Strive to eliminate all fatal and serious injury bicycle and pedestrian related crashes.
 - **Policy TC-12.2 Design Standards.** Support design upgrades to bicycle and pedestrian facilities to increase connectivity and safety citywide.
 - **Policy TC-12.6 Bike Route Connectivity.** Develop and sign a network of bicycle routes that provide connectivity between homes, job centers, schools and other frequently visited destinations.

- **Policy TC-12.7 Emphasis on Walking and Biking.** Encourage more people to walk and bicycle for a variety of purposes.
- **Policy TC-12.8 Bicycle Parking.** Support the expansion of the bicycle parking network in Pleasant Hill.
- Goal TC-13 Reduce congestion and vehicle trips through non-automobile transportation.
 - **Policy TC-13.1 Bus and Rail Services.** Coordinate with local transit providers (i.e., bus, paratransit, and rail service) to provide expanded schedules and services that meet the needs of Pleasant Hill residents.
 - Policy TC-13.2 Innovative Transportation Technologies. Work with transit providers, employers, schools, and developers to encourage innovative technologies that promote more effective and expanded use of transit and facilitate other innovations to serve first and last mile travel, such as mobility hubs and micromobility (e-scooters, e-bikes).
 - **Policy TC-13.3** Support County Connection Improvements. Support County Connection to improve all types of accessibility and comfort for their facilities and to incorporate intermodal facilities where feasible
 - Policy TC-13.4 Transit for Commuters and Special Needs Populations. Work with transit providers and other regional TDM entities to promote and incentivize use of transit for commuters, seniors, students, and persons with disabilities.
- Goal TC-14 Provide for the safe and efficient movement of goods to support commerce, industry, and the community
 - **Policy TC-14.3** Minimize Truck Impacts on Air Quality and Noise Levels. Minimize the impact of truck parking and loading/unloading activities on air quality and noise levels.
- Goal TC-15 Reduce vehicle trips and vehicle trip lengths and manage vehicle congestion through a comprehensive program of transportation resources and services.
 - **Policy TC-15.1 TDM Alternatives.** Meet the increased transportation needs of the community with TDM alternatives.
 - **Policy TC-15.2 Require TDM Programs.** Require new development to implement appropriate TDM programs to encourage walking, biking, carpooling, and transit use, and to reduce vehicle trips.
 - **Policy TC-15.3 TDM for New Development.** All new development with more than 10 housing units or over 5,000 square feet of non-residential uses shall be required to include a detailed and measurable TDM program.
 - **Policy TC-15.6 TDM Measures for Non-Residential Land Uses.** Encourage measures to reduce vehicular trips and vehicle-miles travelled (VMT). Examples are the provision of on-site childcare and after-school care facilities, and on-site modular miniconference rooms for virtual meetings.

Transportation and Circulation Element Implementation Programs

- **Program G Non-automobile Commute Incentives.** Prepare an analysis of potential incentives to encourage City employees to commute to work using alternative means, including BART and bus passes, ridesharing, van pooling, and secure bicycle storage facilities.
- **Program I**Complete Streets Best Practices. Develop and apply a complete streets best practices checklist to guide the design and review of proposed transportation improvement projects incorporating appropriate provisions from standard reference guidelines from federal, state and local sources (e.g., Federal Highway Administration, Caltrans, MTC, ABAG, ITE, etc.).
- Program J Citywide Bicycle Plan and Pedestrian Master Plan. Update every seven (7) years the Citywide Bicycle Plan and Pedestrian Master Plan to specify bicycle and pedestrian facility networks, and to identify and prioritize bicycle and pedestrian facility needs in the City.
- **Program K Explore Independent Alignments.** Prepare an analysis of potential for the dedication and preservation of independent alignments, including utility, abandoned waterways, and railroad right of ways, for the development of bicycle paths.
- **Program L** Review and Maintenance of Benchmarks. Ensure public bicycle and pedestrian needs are regularly reviewed by preparing and maintaining benchmark pedestrian and bicyclist volumes and movements.
- **Program N Bicycle and Pedestrian Design Standards.** Prepare updated design standards and upgrades for bicycle and pedestrian facilities consistent with the Bicycle and Pedestrian Master Plan.
- **Program P** Incentivized Reduced Vehicle Trips. Create incentives for existing employers to reduce their vehicle trips.
- Program Q Promote Carpools and Vanpools. Promote the use of carpools and vanpools by supporting and advertising services and programs implemented by 511ContraCosta.org, which operates transportation demand management (TDM) programs and services in the city.
- **Program R Transportation Demand Management System.** Develop a transportation demand management program checklist and seek to fund TDM fee.
- **Program U Bike Route Connectivity.** Develop and sign a network or bicycle routes that provide connectivity between homes, job centers, schools, and other frequently visited destinations.
- Goal ENV-8 Become a low carbon community that strives to exceed State GHG reduction goals by 2040.
 - **Policy ENV-8.4 Land Use and Transportation Priorities.** Support land uses and transportation improvements that prioritize alternative transportation modes that will reduce the number and length of automobile trips.

Policy ENV-8.6 Electric Vehicle Infrastructure. Require installation of electric vehicle charging stations as a ratio of total required parking for new and redeveloped commercial and multi-family projects and require new single-family residential development to include 220-volt outlets in all garages.

Goal E-6 Encourage the development and expansion of critical communications and transportation infrastructure.

- **Policy E-6.2 Transportation Systems.** Encourage the installation of electric vehicle charging stations, ride sharing hubs, and bike/scooter rental services to support consumer interest in alternative transportation modes. Evaluate the changing needs for parking in commercial and mixed-use districts. Promote expansion of transit services.
- **Policy E-6.3** Active Transportation. Promote the use of the City's trail systems to increase pedestrian and bike travel, particularly for local work trips. Develop circulation designs in mixed use districts, including Downtown, to promote pedestrian access and bike/scooter travel.

Economics and Economy Element Implementation Programs

Program N Electric Vehicle and Micromobility Charging Stations. Develop a plan for the location and development of publicly available charging stations for autos and other types of personal electric transportation.

According to the BAAQMD 2017 CEQA Air Quality Guidelines, the threshold for criteria air pollutants and precursors requires an assessment of the rate of increase of plan VMT and population. Table 3.2-7 summarizes the net increase in population versus VMT for 2040 General Plan buildout. The proposed plan is projected to accommodate a population of 70,397 persons by the year 2040, which is an increase of 36,204 persons or 106% compared to baseline conditions (34,193 persons). The proposed plan would generate an estimated daily VMT of 3,018,600 miles in the year 2040, which is an increase of 1,131,900 miles or 60 percent compared to existing (2022) conditions (1,886,700 miles).

Table 3.2-7 Net Increase in 2040 General Plan Population versus VMT

Scenario	Existing (2022)	2040 General Plan Buildout	Net Increase
Population	34,193	70,397	36,204
Percentage change			106%
VMT	1,886,700	3,018,600	1,131,900
Percentage change			60%
Source: Fehr & Peers, 2022			

The 2040 General Plan emphasizes changing land uses to concentrate growth and residences near jobs and services to reduce singular vehicle trips and encourage alternative models of travel. As shown in Table 3.2-7 above, the City's population increase would be proportionately greater than the VMT increase. As such, development facilitated by the 2040 General Plan would result in an increase in VMT that is less than the increase in service population. As discussed under *Specific*

Thresholds of Significance above, if a plan's VMT increase is less than or equal to the plan's projected population increase, impacts related to operational criteria pollutant emissions would be less than significant. Nonetheless, individual development projects under the plan could generate potentially significant operational criteria air pollutant unless analyzed and mitigated. However, implementation of Mitigation Measure AQ-2, described below, requires projects that exceed the BAAQMD screening sizes to evaluate project-specific operation emissions and to mitigate impacts to a less-than-significant level if operational-related air pollutants exceed the BAAQMD-adopted thresholds of significance. Therefore, 2040 General Plan cumulative operational criteria pollutant impacts related to air pollutant emissions and consistency with associated air quality standards would be less than significant with mitigation.

Mitigation Measures

MITIGATION MEASURE AQ-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO REDUCE CONSTRUCTION CRITERIA POLLUTANT EMISSIONS

To reduce temporary increases in criteria air pollutant emissions during the construction phase for discretionary development projects that are subject to CEQA which exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, the City shall adopt the following General Plan Policy to be implemented as part of the project approval process:

New Policy: Require projects that exceed the BAAQMD screening sizes to evaluate project-specific construction emissions in conformance with the BAAQMD methodology and if construction-related criteria air pollutants exceed the BAAQMD thresholds of significance, require the project applicant to mitigate the impacts to a less-than-significant level.

MITIGATION MEASURE AQ-2: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO REDUCE OPERATIONAL CRITERIA POLLUTANT EMISSIONS

To reduce long-term increases in air pollutants during the operation phase for discretionary development projects that are subject to CEQA that exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, the City shall adopt the following General Plan Policy:

New Policy: Require projects that exceed the BAAQMD screening sizes to evaluate project-specific operation emissions in conformance with BAAQMD CEQA Guidelines, and if operation-related air pollutants exceed the BAAQMD-adopted thresholds of significance, require the project applicant to mitigate the impact to a less-than-significant level.

Level of Significance

Less than significant with mitigation

Toxic Air Contaminants Emissions Exposure

Significance Criterion c: Would the proposed plan expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 Construction activities for individual projects facilitated by the 2040 General Plan Lasting Longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. Implementation of the proposed plan may also expose sensitive receptors to additional operational sources of TACs. Impacts would be less than significant with mitigation.

Construction

Development facilitated by the 2040 General Plan would result in DPM exhaust emissions from offroad, heavy-duty diesel equipment associated with site preparation (e.g., excavation, grading, clearing), building construction, and other miscellaneous construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential non-cancer⁸ health impacts.⁹ Generation of DPM from construction typically occurs in a single area for a short period of time. Construction of development facilitated by the 2040 General Plan would occur over approximately 18 years but use of diesel-powered construction equipment in any one area would likely occur for no more than a few years for an individual project and would cease when construction is completed in that area. It is not possible to quantify risk without identified specific project details and locations, as impacts would vary based on location, intensity, construction methods, and other project-specific factors. For example, a project proposing construction of a small-scale commercial building on an infill site over a six-month construction period would generally have less impacts than a large-scale commercial development on an undeveloped site with a two-year constriction period.

The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the development. DAQMD uses an exposure period of 30 years. Day of the california of the environment of the exposure period; however, such assessments should be limited to the period of 30 years.

⁸ Non-cancer risks include premature death, hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function (CARB 2022b).

⁹ CARB. 2022b. Overview: Diesel Exhaust & Health. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health (accessed November 2022).

¹⁰ OEHHA. 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0 (accessed October 2022).

¹¹ BAAQMD. 2016. Air Toxics NSR Program Health Risk Assessment Guidelines. December. https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en (accessed October 2022).

The maximum PM₁₀ and PM_{2.5} emissions would occur during demolition, site preparation and grading activities, which would only occur for a portion of the overall construction duration. PM₁₀ and PM_{2.5} emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less intensive construction equipment. The 2040 General Plan contains the following policy that would have the effect of minimizing construction TACs from future projects facilitated by the 2040 General Plan:

Goal ENV-7 Meet or exceed State and Federal Air quality standards.

Policy ENV-7.6 Best Management Construction Practices. Require new development to use best management construction practices in accordance with BAAQMD standards.

Future projects facilitated by the 2040 General Plan would also be required to be consistent with the applicable 2017 Clean Air Plan, BAAQMD regulatory requirements and control strategies, and the CARB In-Use Off-Road Diesel Vehicle Regulation, which are intended to reduce emissions from construction equipment and activities. Additionally, future development facilitated by the 2040 General Plan would be required to comply with Mitigation Measure AQ-1requiring implementation of construction emission measures that would also reduce construction-related TACs. According to the OEHHA, construction of individual projects lasting longer than two months or placed within 1,000 feet of sensitive receptors could potentially expose nearby sensitive receptors to substantial pollutant concentrations. In addition, these future projects could exceed BAAQMD thresholds of an increased cancer risk of greater than 10.0 in a million and an increased non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute). As such, construction impacts from TAC emissions would be potentially significant. However, implementation of Mitigation Measure AQ-3 would require coordination with the City to determine if a construction HRA would need to be performed for future projects with construction timelines greater than two months and within 1,000 feet of sensitive receptors, in order to identify and reduce potential risk exposure to nearby sensitive receptors. Therefore, construction-related TACs exposure impacts would be less than significant with mitigation.

Operation

Development facilitated by the 2040 General Plan could accommodate a net increase of approximately 19,216 residential units and up to 9,156,213 net new non-residential gross square feet. Development facilitated by the 2040 General Plan in accordance with land use and zoning regulations would not site land uses that typically generate TAC, such as industrial land uses, in close proximity to residential land uses. Additionally, if the proposed commercial, neighborhood business, mixed uses, and industrial uses site a new stationary TAC source, like an emergency generator, then said stationary source would be required to receive a permit from BAAQMD. The permitting process would ensure that the stationary source does not present a health risk to existing nearby sensitive receptors.

The primary mobile source of TACs within the plan area is truck idling and use of off-road equipment. New warehousing operations could generate substantial DPM emissions from off-road equipment use and truck idling. In addition, some warehousing and industrial facilities may include use of TRUs for cold storage. Such potential future uses could generate an increase in DPM that would contribute to cancer and noncancer health risk at nearby sensitive receptors. Without project-specific analysis, health risk impacts from nonpermitted sources associated with development of industrial and commercial land uses under the proposed plan are considered

potentially significant. However, with implementation of Mitigation Measure AQ-4, that requires new applicants for land uses that would generate substantial diesel truck travel to determine the appropriate level of operational health risk assessment required, operational 2040 General Plan impacts related to TAC emissions would be less than significant with mitigation.

Mitigation Measures

MITIGATION MEASURE AQ-3: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO CONDUCT AND IMPLEMENT CONSTRUCTION HEALTH RISK ASSESSMENT

To identify and reduce potential risk exposure to nearby sensitive receivers during the construction of individual projects facilitated by the 2040 General Plan, the City shall adopt the following General Plan Policy:

- New Policy: For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize equipment rated US EPA Tier 4 for equipment of 50 horsepower or more, or construction equipment fitted with Level 3 Diesel Particulate Filters for all equipment of 50 horsepower or more, and/or alternative fuel construction equipment, the project applicant shall coordinate with the City to determine if a construction health risk assessment (HRA) shall be performed. If an HRA is to be performed, the HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds:
 - Non-compliance with Qualified Community Risk Reduction Plan;
 - Increased cancer risk of > 10.0 in a million;
 - Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
 - Ambient PM_{2.5} increase of > 0.3 μg/m³ annual average

If risk exceeds the thresholds, measures such as requiring the use of Tier 4 engines, Level 3 Diesel Particulate Filters, and/or alternative fuel construction equipment shall be incorporated to reduce the risk to appropriate levels.

MITIGATION MEASURE AQ-4: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO REDUCE OPERATIONAL TOXIC AIR CONTAMINANTS

To ensure sensitive receptors are not exposed to toxic air contaminant emissions during the operation phase for discretionary development projects that are subject to CEQA which exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, the City shall adopt the following General Plan Program:

- New Program: Require applicants for industrial or warehousing land uses or commercial land uses that would generate substantial diesel truck travel (i.e., 100 diesel trucks per day or 40 or more trucks with diesel-powered transport refrigeration units per day) to contact BAAQMD to determine the appropriate level of operational health risk assessment (HRA) required. If required, the operational HRA shall be prepared in accordance with the Office of Environmental Health Hazard Assessment and BAAQMD requirements and mitigated to an acceptable level. Typical measures to reduce risk impacts may include, but are not limited to:
 - a. Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible.
 - b. Electrifying warehousing docks.
 - c. Truck Electric Vehicle (EV) Capable trailer spaces.

- d. Requiring use of newer equipment and/or vehicles.
- e. Restricting off-site truck travel through the creation of truck routes.

Level of Significance

Less than significant with mitigation

Objectionable Odors

Significance Criterion d: Would the proposed plan result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 The 2040 General Plan could create objectionable odors that could adversely affect a substantial number of people. Impacts related to odors would be less than significant with mitigation.

Construction

Implementation of the 2040 General Plan would generate oil and diesel fuel odors during construction from equipment use as well as odors related to asphalt paving. The odors would be limited to the construction period and would be temporary. Therefore, odors emitted from the construction of individual future projects under the 2040 General Plan would be less than significant.

Operation

As stated in the BAAQMD CEQA Guidelines, land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food manufacturing plants, chemical plants, composting, refineries, landfills, and confined animal facilities. Development facilitated by the 2040 General Plan would include residential, commercial and retail, office, semi-public and institutional, and light industrial development. These land uses typically do not produce objectionable odors. In addition, it is not anticipated that the 2040 General Plan would add land uses that would have the potential to expose sensitive receptors, such as residences, to odors. However, certain commercial and industrial uses would have the potential to generate nuisance odors. Other odors from development of the 2040 General Plan include odor emissions that would be limited to odors associated with vehicle and engine exhaust and idling; however, odors from vehicles are not stationary and are dispersed throughout the roadway network. Therefore, individual projects under the plan could generate potentially significant objectionable odors unless analyzed and mitigated. However, implementation of Mitigation Measure AQ-5, which requires the evaluation of land uses and development projects near land uses that typically generate odors, would reduce this impact to less than significant. Therefore, 2040 General Plan impacts related to operational odor impacts would be less than significant with mitigation.

Mitigation Measures

MITIGATION MEASURE AQ-5: ADOPT AND IMPLEMENT A NEW GENERAL PLAN PROGRAM TO REDUCE OPERATIONAL ODOR IMPACTS

To reduce odor impacts associated with development facilitated by the 2040 General Plan, the City shall adopt the following General Plan Program to be implemented as part of the project approval process:

New Program: Odor Impacts. Consider odor impacts when evaluating land uses and development projects near wastewater treatment plants, treatment plant expansion projects, waste transfer stations, and other odor potential sources per the latest BAAQMD screening distances and guidelines.

Level of Significance

Less than significant with mitigation

3.2.5 Cumulative Impacts

The geographic scope of the cumulative air quality analysis is the regional air basin, specifically the SFBAAB. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Pleasant Hill, Concord, Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County in addition to the proposed plans.

Criteria Air Pollutants

The SFBAAB is in non-attainment for federal standards of ozone and $PM_{2.5}$ and in non-attainment for the State standard for ozone, $PM_{2.5}$, and PM_{10} . The SFBAAB is in attainment of all other federal and State standards. Development facilitated by the 2040 General Plan would generate particulate matter and the ozone precursors (ROG and NO_X) in the area during construction and operation. As described under Impact AQ-1, the 2040 General Plan would be consistent with the overall goal of the 2017 Clean Air Plan control measures as development would comply with the latest Title 24 regulations and would increase density in urban areas in proximity to transit, allowing for greater use of alternative modes of transportation. Development facilitated by the 2040 General Plan does not contain elements that would disrupt or hinder implementation of any 2017 Clean Air Plan control measures. In addition, the 2040 General Plan would support the primary goals of the 2017 Clean Air Plan. Discussion of these impacts considers the cumulative nature of criteria pollutants in the region. Therefore, the 2040 General Plan would not result in a cumulatively considerable contribution to a conflict with or obstruction of implementation of the applicable air quality plan.

As described under Impact AQ-2, 2040 General Plan construction would temporarily increase air pollutant emissions, possibly creating localized areas of unhealthy air pollution levels or air quality nuisances. BAAQMD has identified feasible fugitive dust control measures for construction activities because fugitive PM₁₀ and PM_{2.5} are of concern. These temporary impacts would be mitigated with Mitigation Measure AQ-1. Implementation of Mitigation Measure AQ-2 would ensure that individual projects as part of plan buildout do not exceed BAQQMD's operational criteria pollutant thresholds. Discussion of these impacts considers the cumulative nature of criteria pollutants in the region; therefore, with mitigation, the project would not result in a cumulatively considerable net increase of a criteria pollutant from construction emissions.

In addition, as described under Impact AQ-2, the 2040 General Plan would result in an increase of operational VMT that would not proportionately exceed the projected population increase per the BAAQMD CEQA Air Quality Guidelines for operational emissions from plans. Therefore, impacts from operational criteria pollutant impacts from the 2040 General Plan would be less than significant and the 2040 General Plan's operational criteria pollutant emissions would not be cumulatively considerable.

Therefore, the overall cumulative impact related to criteria air pollutants would be less than significant.

Toxic Air Contaminants

As identified under Impact AQ-3, 2040 General Plan development would not have a significant impact from TACs with implementation of 2040 General Plan policies and Mitigation Measures AQ-3 and AQ-4As discussed under Specific Thresholds of Significance, a project would have a cumulatively considerably impact associated with health risks from TAC and PM_{2.5} emissions if the aggregate total emissions of all past, present, and foreseeable future sources within a 1,000-foot radius of the property line of the source plus the project's contribution exceed 100 in a million or the BAAQMD non-cancer risk thresholds. As identified under Impact AQ-3, individual development under the 2040 General Plan would not have a significant impact from TACs with implementation of 2040 General Plan policies and Mitigation Measures AQ-3 and AQ-4. However, implementation of the 2040 General Plan and planned and approved projects from the cumulative projects list would generate TACs that could contribute to elevated risk levels in the city. While individual projects would achieve the project-level risk threshold of 10 per million with mitigation, they would nonetheless contribute to the higher levels of risk in the city and there may be instances where sensitive receptors are exposed to combined increased risk levels exceeding the BAAQMD cumulative risk thresholds from projects within a 1,000-foot radius. Therefore, the 2040 General Plan's cumulative contribution to health risk is considered significant and unavoidable.

Odors

As identified under Impact AQ-4, development facilitated by the 2040 General Plan would not have a significant impact from odor emissions with implementation of Mitigation Measure AQ-5. Construction emissions would disperse rapidly with distance, and therefore construction projects in close proximity to one another would not result in combined odors above those analyzed. In addition, development facilitated by the 2040 General Plan is not anticipated to contain uses known to result in objectionable odors and therefore cumulative odor impacts from multiple developments would not result in a cumulatively considerable increase in odors. Therefore, the cumulative impact related to odors would be less than significant.

Overall Level of Cumulative Significance

Significant and unavoidable

Pleasant Hill 2040 General Plan		
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City of Pleasant Hill

3.3 Biological, Agriculture, and Forestry Resources

3.3.1 Introduction

This section describes existing biological, agricultural, and forestry resources in the General Plan area as well as the relevant regulatory framework. This section also evaluates possible direct and indirect impacts to biological resources, including special-status species, sensitive natural communities, regulated waters and wetlands, sensitive habitat and mature native trees, and wildlife movement corridors associated with implementation of the proposed plan. This section also addresses and evaluates potential impacts related to agricultural and forestry resources. Information included in this section is based on online record searches of the following databases: the California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CNDDB), ¹ the California Native Plant Society (CNPS) *Online Inventory of Rare, Threatened and Endangered Plants of California*, ² the U.S. Fish and Wildlife Service (USFWS) *National Wetlands Inventory* (NWI), ³ USFWS *Critical Habitat Mapper*, ⁴ and USFWS *Information, Planning, and Conservation System* (IPaC). ⁵

3.3.2 Environmental Setting

Vegetation Communities and Other Land Cover Types

Definitions

Vegetation communities provide wildlife habitat components including food, shelter, movement corridors, and breeding opportunities for wildlife species. They are classified in general terms with an emphasis on vegetation structure, vegetation species composition, soil structure, and water availability. Some wildlife species are generalists that use a variety of habitats, while other species are adapted to very specific habitats. Species that are limited to a single habitat type are more vulnerable to habitat loss and disturbance than are generalists and therefore, may be more at risk to experience population declines.

Pleasant Hill (General Plan Area)

The General Plan area encompasses the land within the Pleasant Hill Sphere of Influence. Pleasant Hill is a predominantly residential community located in central Contra Costa County. The General Plan area is primarily developed and does not offer suitable habitat for special-status species or other special-status biological resources. However, Pleasant Hill is located south of Suisun Bay and east of San Francisco Bay and generally representing an ecologically diverse area supporting many plants and animal species, including special-status species.

The General Plan area has the following vegetation communities: annual grassland, blue oak woodland, valley oak woodland, and valley foothill riparian. These communities provide resources

¹ California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Database, Rarefind V. (accessed September 2022).

² California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 0.0) https://www.rareplants.cnps.org (accessed September 2022).

³ U.S. Fish and Wildlife Service (USFWS). 2022a. National Wetlands Inventory (NWI) Wetlands mapper. Available at:

https://www.fws.gov/wetlands/data/mapper.html (accessed September 2022).

⁴ USFWS. 2022b. Environmental Conservation Online System, Critical Habitat Mapper [online].

https://ecos.fws.gov/ecp/report/table/critical-habitat.html (accessed September 2022).

⁵ USFWS. 2022c. Information for Planning and Conservation (IPaC) [online]. https://ecos.fws.gov/ipac/ (accessed September 2022).

for a wide variety of wildlife species. The California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) closely monitor communities classified as sensitive native plant communities or that provide habitat for sensitive wildlife species. In addition, the General Plan area has urban land uses, which are not vegetation communities.

Existing information for the General Plan area and surrounding vicinity was utilized to create a list of vegetation communities and land cover types. The plant community descriptions and nomenclature discussed are based on Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California*. ⁶ Wildlife species assemblage information was based on existing documentation gathered from the *California Wildlife Habitat Relationships System* ⁷ and *A Manual of California Vegetation, Second Edition* ⁸. Table 3.3-1 and Figure 3.3-1 display the major vegetation communities and other land cover types present in the General Plan area.

Table 3.3-1 Vegetation Communities and Land Cover Types in the General Plan Area

Type ⁹	Acres	Percent	
Annual Grassland	632	11%	
Blue Oak Woodland	125	2%	
Coastal Oak Woodland	101	2%	
Valley Oak Woodland	44	1%	
Valley Foothill Riparian	84	1%	
Urban	4,817	83%	
Total	4,527	100	

ANNUAL GRASSLAND

Annual grasslands are open grasslands composed primarily of annual herbaceous and forb species. This habitat type exists throughout Pleasant Hill with most concentrations occurring at the northwestern portion of Pleasant Hill, where introduced annual grasses are the dominant plant species. These include wild oats (*Avena fatua, A. barbata*), soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), red brome (*B. tectorum*), wild barley (*Hordeum murinum ssp. leporinum*), and rattail sixweeks grass (*Festuca myuros*). Common forbs include broadleaf filaree (*Erodium botrys*), redstem filaree (*E. cicutarium*), turkey mullein (*Croton setiger*), true clovers (*Trifolium spp.*), bur clover (*Medicago polymorpha*), popcorn flower (*Plagiobothrys* spp.), California poppy (*Eschscholzia californica*), and many others. Perennial grasses, found in moist, lightly grazed, or relic prairie areas, are dominated by California oatgrass (*Danthonia californica*), Pacific hairgrass (*Deschampsia cespitosa* ssp. *holciformis*), and sweet vernal grass (*Anthoxanthum odoratum*). These alliances can include, but are not limited to, *Avena (barbata, fatua)* semi-natural stands and *Bromus (diandrus, hordeaceous*) – *Brachypodium distachyon* semi-natural stands. ¹⁰ Annual grasslands and relic perennial grasslands within these annual grasses occur in patches of various sizes throughout the

⁶ Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Wildlife, Nongame Heritage Program. 156 pgs.

⁷ CDFW. 2014. California Wildlife Habitat Relationships System (CWHR). Available at: https://wildlife.ca.gov/Data/CWHR (accessed October 2022).

⁸ Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

⁹ CDFW CWHR, op. cit.

¹⁰ Sawyer et al., op. cit.

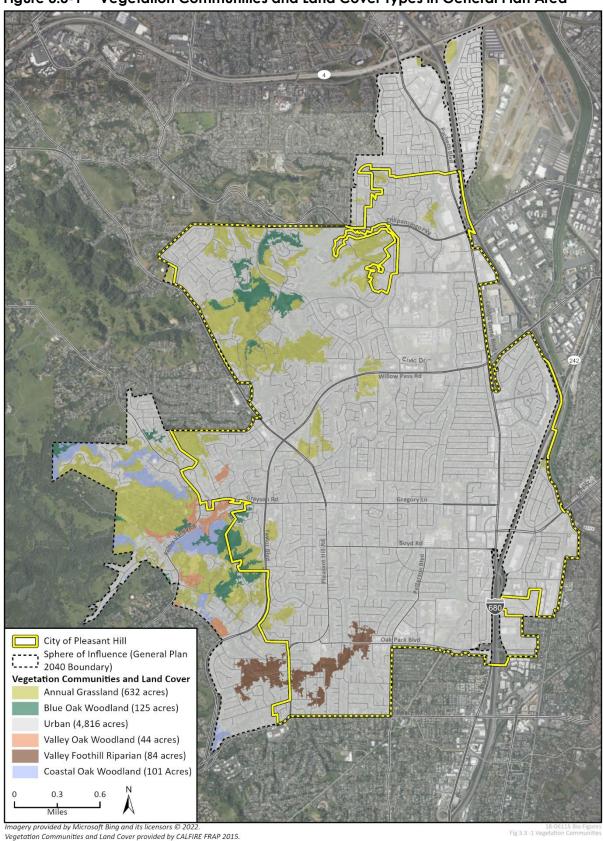


Figure 3.3-1 Vegetation Communities and Land Cover Types in General Plan Area

state. Annual grassland occurs mostly on flat plains to gently rolling foothills. Climatic conditions are typically Mediterranean, with cool, wet winters and dry, hot summers.

BLUE OAK WOODLANDS

Generally, these woodlands have an over story of scattered trees, although the canopy can be nearly closed. The canopy is dominated by broad-leaved trees 16 feet to 50 feet tall, commonly forming open savanna-like stands on dry ridges and gentle slopes. Blue oak (*Quercus douglasii*) is typically the dominant tree species. Shrubs such as poison oak (*Toxicodendron diversilobum*), California coffeeberry (*Frangula californica*), buckbrush (*Ceanothus cuneatus*), and redberry (*Rhamnus crocea*) are often present but rarely extensive, and often occur on rock outcrops. Typical understory is composed of an extension of Annual Grassland vegetation described above. Blue oak woodland typically corresponds to the *Quercus douglasii* Woodland Alliance. ¹¹

COASTAL OAK WOODLANDS

Coastal oak woodlands, which occur in the vicinity of Pleasant Hill, are extremely variable. The overstory consists of deciduous and evergreen hardwoods (mostly oaks 15 to 70 feet tall) sometimes mixed with scattered conifers. In mesic sites, the trees are dense and form a closed canopy. In drier sites, the trees are widely spaced, forming an open woodland or savannah. The understory is equally variable. In some instances, it is composed of shrubs from adjacent chaparral or coastal scrub which forms a dense, almost impenetrable understory. More commonly, shrubs are scattered under and between trees. Coastal oak woodlands occupy a variety of Mediterranean type climates that vary from north to south and west to east (the climate becomes hotter and drier toward the south and east.) Coastal oak woodland typically corresponds to the *Quercus agrifolia* Forest and Woodland Alliance. ¹²

VALLEY OAK WOODLANDS

Remnant patches of this habitat are found in the Sacramento Valley from Redding south, in the San Joaquin Valley to the Sierra Nevada foothills, in the Tehachapi Mountains, and in valleys of the Coast Range from Lake County to western Los Angeles County. This habitat varies from savanna-like to forest-like stands with partially closed canopies, comprised mostly of winter-deciduous, broadleaved species. Within Pleasant Hill this community occurs only near Shannon Hills Park in the western portion of the city. Canopies of these woodlands are dominated almost exclusively by valley oaks (*Quercus lobata*). The shrub understory consists of poison oak, blue elderberry (*Sambucus Mexicana*), toyon (*Heteromeles arbutifolia*), California coffeeberry, and California blackberry (*Rubus ursinus*). Various species of wild oats, bromes (*Bromus* spp.), barleys (*Hordeum* spp.), ryegrasses (*Festuca* spp.), and needlegrasses (*Stipa* spp.) dominate the ground cover. Valley oak woodland typically corresponds to the *Quercus lobata* Woodland Alliance. 14

VALLEY FOOTHILL RIPARIAN

Valley foothill riparian vegetation communities are located within Pleasant Hill along Murderer's Creek and other drainages throughout the southern extent of the city. The dominant species in the canopy layer of valley foothill riparian habitats include cottonwood (*Populus* spp.), and valley oak. Subcanopy trees are white alder (*Alnus rhombifolia*), box elder (*Acer negundo*) and Oregon ash

¹¹ Ibid.

¹² Sawyer et al., op. cit.

¹³ CDFW CWHR, op. cit.

¹⁴ Sawyer et al., op. cit.

(*Fraxinus latifolia*). Typical understory shrub layer plants include California wild rose (*Rosa californica*), California blackberry, blue elderberry, poison oak, and willows (*Salix* spp.). The herbaceous layer consists of sedges (*Carex* spp.), rushes (*Juncus* spp.), grasses, miner's lettuce (*Claytonia perfoliata*), California mugwort (*Artemisia douglasiana*), poison-hemlock (*Conium maculatum*), and hoary nettle (*Urtica dioica* ssp. *holosericea*). These alliances can include, but are not limited to, *Platanus racemosa* Woodland Alliance, and the various *Populus* alliances, depending upon dominant species present.¹⁵

Riparian communities are associated with rivers and streams as well as lakes, ponds, seeps, bogs, meadows, and springs. Valley foothill riparian communities occur in the Central Valley and the lower foothills of the Cascade, Sierra Nevada, and Coast ranges. Valley foothill riparian habitats range from sea level to 3,000 feet, reaching an elevation of 5,000 feet on south-facing slopes. Valley-foothill riparian habitats are found in valleys bordered by sloping alluvial fans, slightly dissected terraces, lower foothills, and coastal plains. They are generally associated with low velocity flows, flood plains, and gentle topography.

URBAN

This land cover type is completely human-made, comprising residential, commercial, office, institutional, and industrial developed areas. Plant species within urban land cover types are typically comprised of ornamental and other non-native invasive plant species, with large, developed areas lacking vegetation.

Waters and Wetlands

Definitions

The term "waters of the U.S." has a broad meaning and incorporates both deep-water aquatic habitats and special aquatic sites, including wetlands. Generally, this term applies to the jurisdictional limits of the authority of the U.S. Army Corps of Engineers (USACE) under the Clean Water Act (CWA). Waters of the U.S. includes essentially all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters.

Wetlands are driven by hydrology and occur where water is present near the soil surface resulting in soil and plant characteristics that are not found in upland (mostly dry) or aquatic (almost always wet and un-vegetated) habitats. Wetlands are generally found in transition zones between upland and aquatic habitats. These terms are further defined along with their application in federal and state regulations below under Section 3.3.3, *Regulatory Framework*.

Pleasant Hill (General Plan Area)

The USFWS NWI is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of waters and wetlands. It should be noted that some wetland and stream features, such as freshwater seeps and springs, are generally not identified as part of the NWI because of the general scale of the mapping effort. The extent of the major wetlands and waterways in Pleasant Hill, based on NWI mapping, is shown on Figure 3.3-2.

15 Ibid.			

City of Pleasant Hill Sphere of Influence (General Plan 2040 Boundary) National Wetland Inventory
Freshwater Forested/Shrub
Wetland Freshwater Pond Riverine Imagery provided by Microsoft Bing and its licensors © 2022.
National Wetlands Inventory data provided by USFWS; 2021.

Figure 3.3-2 Wetlands and Aquatic Resources in General Plan Area

Wetland features that have been mapped either within or near Pleasant Hill include freshwater forested/shrub wetland, freshwater ponds, and riverine habitat.16 Wetlands and waters provide habitat for a variety of special-status plant and animal species and are typically subject to USACE jurisdiction under section 404 of the CWA. In addition, the State of California has adopted a no-netloss policy for wetlands which is administered by the CDFW and State Water Resources Control Board (SWRCB). A description of each of these aquatic features as well as their location within the General Plan area is provided below.

FRESHWATER FORESTED/SHRUB WETLAND

These wetlands include non-tidal waters that are dominated by trees and shrubs, with emergent herbaceous plants, mosses and/or lichens. The NWI also includes within this category wetlands that lack vegetation if they also exhibit the same criteria as described for freshwater emergent wetlands. Freshwater forested/shrub wetlands are generally dominated by woody vegetation such as shrubs and trees. This wetland category also can include riparian habitats. The reach of Walnut Creek that runs through the eastern portion of the General Plan area is considered freshwater forested/shrub wetland likely due to the presence of riparian woody vegetation.

FRESHWATER POND

Freshwater ponds include non-tidal waters, typically less than 20 acres in size and typically with vegetative cover along its edges such as trees, shrubs, emergent herbaceous plants, mosses, and/or lichens. Freshwater ponds can be man-made or natural and typically consist of an area of standing water with variable amounts of shoreline. These wetlands and deep-water habitats are dominated by plants that grow on or below the surface of the water. Freshwater pond habitats in the General Plan area are characterized by developed surroundings at either golf courses or as man-made features at the Diablo Valley College and near the Contra Costa County government building complex in the eastern portion of Pleasant Hill.

RIVERINE

Riverine habitats are stream systems that include all wetlands and deep-water habitats contained in natural or artificial channels that contain periodically or continuously flowing water. This system may also form a connecting link between two bodies of standing water. Substrates generally consist of rock, cobble, gravel, or sand. Features mapped as riverine wetlands in the NWI include drainages and creeks, such as Grayson Creek and portions of Murderer's Creek in Pleasant Hill.

Sensitive Natural Communities and Critical Habitats

Definitions

Sensitive natural communities are vegetation types, associations, or sub-associations that support concentrations of special-status plant and/or wildlife species, are of relatively limited distribution, and/or are of particular value to wildlife. Currently, CDFW publishes the California Sensitive Natural Communities List online. Natural Communities are evaluated using NatureServe's Heritage Methodology, the same system used to assign global and State rarity ranks for plant and animal species in the CNDDB. Evaluation is done at both the Global (full natural range within and outside of California) and State (within California) levels resulting in a single G (global) and S (State) rank, ranging from 1 (very rare and threatened) to 5 (demonstrably secure). According to the CDFW

¹⁶ USFWS NWI, op. cit.

Vegetation Program, Natural Communities with State ranks of S1-S3 and certain other specified associations are considered imperiled, and thus, potentially of special concern. Riparian areas are also considered sensitive natural communities by CDFW.

Critical habitat is a term used in the federal Endangered Species Act (ESA) and is defined as a specific geographic area (or areas) that contain features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. These areas provide notice to the public and land managers of the importance of these areas to the conservation of a listed species. Special protections and/or restrictions are possible in these areas when federal funding, permits, licenses, authorizations, or actions occur or are required.

Pleasant Hill (General Plan Area)

The CDFW's CNDDB lists four sensitive natural communities that occur within the U.S. Geological Survey (USGS) *Walnut Creek* and the eight surrounding 7.5-minute series quadrangles (*Diablo, Clayton, Oakland East, Briones Valley, Honker Bay, Vine Hill, Benicia,* and *Las Trampas Ridge*). These natural communities include Coastal Brackish Marsh, Northern Coastal Salt Marsh, Northern Maritime Chaparral, and Serpentine Bunchgrass. Although these sensitive natural communities are recorded in the regional vicinity of Pleasant Hill, none are mapped within the General Plan area. ¹⁷

The USFWS Critical Habitat Mapper ¹⁸ and the National Marine Fisheries Service (NMFS) West Coast Critical Habitat website ¹⁹ depict designated critical habitats in the vicinity of the General Plan area. No federally designated critical habitat is located within the General Plan area; however Pleasant Hill is located proximate to critical habitat for several species. As shown on Figure 3.3-3, critical habitat for Alameda whipsnake (*Masticophis lateralis euryxanthus*) and California red-legged frog (*Rana draytonii*) is located immediately west of the Pleasant Hill Sphere of Influence in the Briones Regional Park open space as well as to the south and east of the Pleasant Hill Sphere of Influence. A portion of the critical habitat for Alameda whipsnake overlaps with the western portion of the Pleasant Hill Sphere of Influence. Critical habitat for Delta smelt (*Hypomesus transpacificus*) and steelhead (*Oncorhynchus mykiss irideus* pop. 11) is also designated within the regional vicinity to the north of the Pleasant Hill Sphere of Influence in the Suisun Bay. ²⁰

¹⁷ CDFW CNDDB, op. cit.

¹⁸ USFWS Critical Habitat Mapper, op. cit.

¹⁹ National Marine Fisheries Service (NMFS). 2022. Critical Habitat [website]. https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#critical-habitat-designations,-maps,-and-gis-data (accessed September 2022).

²⁰ USFWS Critical Habitat Mapper, op. cit.

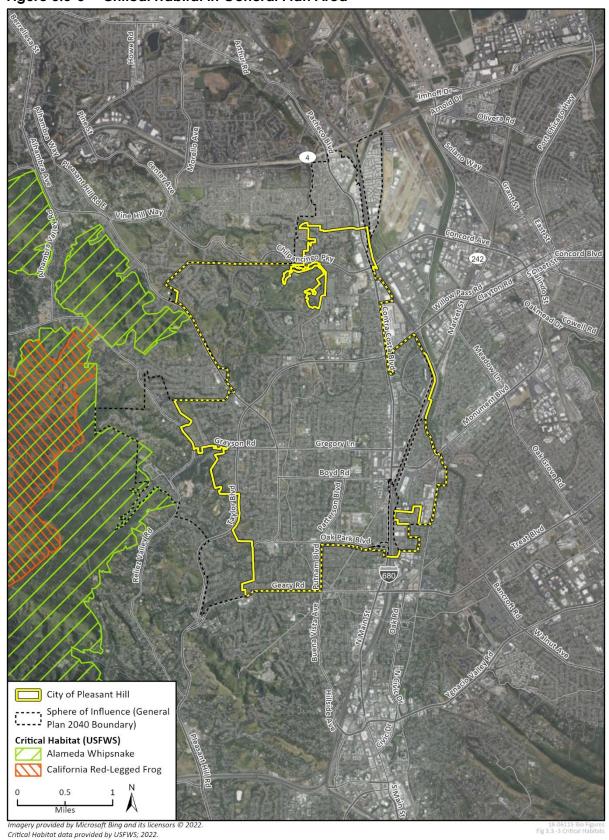


Figure 3.3-3 Critical Habitat in General Plan Area

Special-Status Species

Definitions

For the purpose of this analysis, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS and/or NMFS under the ESA; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); plants listed as rare by the CDFW under the Native Plant Protection Act; and animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the CDFW. Those plants ranked as California Rare Plant Rank (CRPR) 1 or 2 are typically regarded as rare, threatened, or endangered under CEQA by lead agencies and were considered as such in this EIR. The CRPR utilizes the following code definitions:

- List 1A = Plants presumed extinct in California
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80 percent occurrences threatened)
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened, or no current threats known)
- List 2 = Rare, threatened or endangered in California, but more common elsewhere

CRPR List 3 species are "review list," and CRPR 4 species are considered "watch list" species. CRPR 3 and 4 species do not typically warrant analysis under CEQA except where they are part of a unique community, from the type locality, or designated as rare or significant by local governments, or where cumulative impacts could result in population—level effects. The CRPR 3 and 4 species reported from the region are not locally designated as rare or significant by the City of Pleasant Hill or Contra Costa County General Plans and are not part of a unique community. Additionally, the City of Pleasant Hill is not known to be the type locality for any ranked plant species. Therefore, potential impacts to CRPR 3 and CRPR 4 species were not considered in this analysis.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered indicators of regional habitat changes or are considered to be potential future protected species. SSC do not have any special legal status except that which may be afforded by the Fish and Game Code. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands, and these species are considered sensitive as described under the CEQA Appendix G questions.

Queries of the USFWS IPaC ²¹, the CDFW CNDDB ²², and CNPS *Online Inventory of Rare, Threatened and Endangered Plants of California* were conducted. ²³ These queries were conducted to obtain comprehensive information regarding state and federally listed species considered to have potential to occur within the General Plan area.

²¹ USFWS IPaC, op. cit.

²² CDFW CNDDB, op. cit.

²³ CNPS op. cit.

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan area) is home to several species protected by federal and State agencies. Important animal species can be found in a variety of habitats in the General Plan area. The CNDDB, ²⁴ CNPS, ²⁵ and USFWS IPaC ²⁶ together list 108 special-status plant and animal species (58 plant species and 50 animal species [inclusive of special animals]) that occur or have potential to occur within the General Plan area. The status and habitat requirements of these species are presented in Appendix B as Tables B-1 and B-2, respectively.

SPECIAL-STATUS PLANTS

Based on the database and literature review, 58 special-status plant species are known to occur, or have potential to occur, in the General Plan area or the surrounding area. Several of these species are associated with sensitive natural communities including open woodland habitats or riparian zones along creeks and waterways. Table B-1 in Appendix B lists these special-status plant species, their listing status, and their CRPR.

Special-status plants that are known or have potential to occur in the General Plan area and surrounding area can occupy a range of habitat types. Some are associated with chaparral, cismontane woodland, and broadleafed upland forests such as Mt. Diablo fairy-lantern (*Calochortus pulchellus*), Diablo helianthella (*Helianthella castanea*), and oval-leaved viburnum (*Viburnum ellipticum*). Others are associated with valley and foothill grasslands such as bent-flowered fiddleneck (*Amsinckia lunar*is), big tarplant (*Blepharizonia plumosa*), and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). Most of the known special-status plant species occurrences are recorded in areas of open space including Las Juntas Open Space Park and Paso Nogal Park. Additionally, some of the species listed are not currently known to be found within the General Plan area limits but are regionally occurring species that could occur in the General Plan area or in the surrounding area.

SPECIAL-STATUS WILDLIFE

Based on the database and literature review, 50 special-status wildlife species are known, or have potential, to occur within the General Plan area or surrounding area. Table B-2 in Appendix B lists these special-status wildlife species, their listing status, and other status designations.

Special-status species are most likely to occur in undeveloped areas and open space areas. However, riparian areas that intersect urban development may also provide habitat and movement corridors for special-status species. The General Plan area and the surrounding area also provide habitat for avian wildlife, including several listed species and other special-status species. Several occurrences of Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), and northern harrier (*Circus hudsonius*) have been recorded within the General Plan area. Ponds, wetlands, streams, and riparian areas may provide habitat for aquatic and semi-aquatic amphibians and reptiles, including California red-legged frog, California tiger salamander (*Ambystoma californiense*), and Alameda whipsnake.

Special-status bats such as pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and big free-tailed bat (*Nyctinomops macrotis*) are State SSCs and have potential to occur within the General Plan area. In addition, although not listed in the CNDDB, mountain lions

²⁴ CDFW CNDDB, op. cit.

²⁵ Ibid.

²⁶ USFWS IPaC, op. cit.

(*Puma concolor*) are legally classified as "specially protected species." In July 2019, the Center for Biological Diversity petitioned CDFW to list mountain lions as threatened under the CESA within a proposed evolutionarily significant unit (ESU) located in Southern California and along the central coast of California. In April 2020, CDFW found that listing of this ESU may be warranted and designated mountain lion within the ESU as a candidate species under CESA. Mountain lions inhabit diverse habitats across most of California and can be found wherever deer are present, which includes the foothills and mountainous areas within the eastern Bay Area where the General Plan area is located.

Wildlife Movement Corridors

Definitions

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary habitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large and small scale. Essential Connectivity Areas (ECAs) are mapped in the report, *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* and represent principal connections between Natural Landscape Blocks. ECAs are regions in which land conservation and management actions should be prioritized to maintain and enhance connectivity between areas of high ecological importance. ²⁷ ECAs are mapped based on coarse ecological condition indicators, rather than the needs of particular species and thus serve most of the species in each region. It is important to recognize that even areas outside of Natural Landscape Blocks and ECAs support important ecological values and should not be immediately discounted as lacking conservation value without further review.

Most of the General Plan area is developed and urbanized and does not provide for wildlife movement corridors. However, the western most extent of the General Plan area overlaps with an ECA that runs from Wildcat Canyon Regional Park in the Berkley and Oakland Hills to the north and extending south to the Calaveras Reservoir (see Figure 3.3-4). This ECA, as a part of the Bay Area hills, may serve as a movement corridor for the state provisionally protected Southern

²⁷ Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration.

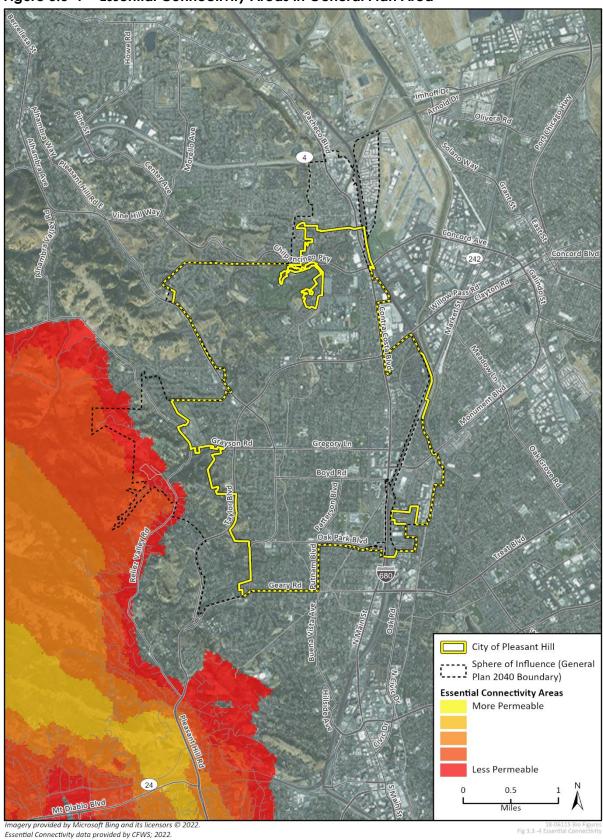


Figure 3.3-4 Essential Connectivity Areas in General Plan Area

California/Central Coast ESU of mountain lion. Small scale habitat corridors important to wildlife movement are also present within the General Plan area, many of which are not mapped as ECAs. Locally, Las Juntas Open Space Park and Paso Nogal Park may serve as smaller scale movement corridors for terrestrial species throughout the General Plan area, as they are mostly continuous vegetated areas connected by Pleasant Hill trails. However, these parks as well as most vegetated areas throughout Pleasant Hill are intersected by streets, are highly disturbed by both human and domestic animal use, and are surrounded by residential development. Additionally, drainages and riverine habitats throughout Pleasant Hill, such as Grayson Creek, provide potential fish and other aquatic wildlife movement habitat.

Important Farmland Resources

Definitions

To characterize the environmental baseline for agricultural resources, Important Farmland Maps produced by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP) were reviewed.²⁸ Unless otherwise expressed, the future use of "Important Farmland" specifically includes the following definitions provided by the DOC:

- Prime Farmland: Land which has the best combination of physical and chemical characteristics for producing crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming standards.
- Unique Farmland: Land of lesser quality soils used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. It is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Examples of crops include oranges, olives, avocados, rice, grapes and cut flowers.
- Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors following recommendations by a local advisory committee.

Pleasant Hill (General Plan Area)

The General Plan area is almost entirely designated as Urban and Built-Up Land and does not include identified farmland. ²⁹ However, a small patch of land along Taylor Boulevard in the western portion of the Pleasant Hill Sphere of Influence is designated as Prime Farmland, Farmland of Statewide Importance, and Grazing Land. Additionally, the area known as Paso Nogal Park is designated as Other Land, which includes land not categorized in another mapping class. Common examples of the Other Land type include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing. ³⁰

²⁸ California Department of Conservation (DOC). 2022. California Important Farmland Finder [map]. https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed October 2022).

²⁹ Ibid.

³⁰ Ibid.

Productive Forestry Resources

Definitions

Forestry resources include forestland, timberland, and timberland production zones. Definitions used for forest land and timberland are those found in the California Public Resources Code (PRC) Sections 12220(g) and 4789.2(g) and California Government Code (CGC) Section 51104(g). These codes define forestland, timberland, and timberland production zones.

Pleasant Hill (General Plan Area)

The General Plan area is mostly designated as Urban and Built-Up Land and does not include identified forest land.³¹ No timberland or timberland production zones exist within the Pleasant Hill Sphere of Influence.

3.3.3 Regulatory Framework

Federal Regulations

Federal Endangered Species Act

Under the ESA, authorization is required to "take" a listed species. Take is defined under Section 3 of the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under federal regulation (50 Code of Federal Regulations [CFR] Sections 17.3, 222.102); "harm" is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Critical habitat is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. Section 7 of the ESA outlines procedures for federal interagency cooperation to conserve federally listed species and designated critical habitat.

Section 7(a)(2) of the ESA and its implementing regulations require federal agencies to consult with USFWS or NMFS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat. For projects where federal action is not involved and take of a listed species may occur, the project proponent may seek to obtain an incidental take permit under Section 10(a) of the ESA. Section 10(a) allows USFWS to permit the incidental take of listed species if such take is accompanied by a Habitat Conservation Plan (HCP) that includes components to minimize and mitigate impacts associated with the take.

The USFWS and NMFS share responsibility and regulatory authority for implementing the ESA (7 United States Code [USC] Section 136, 16 USC Section 1531 et seq.).

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (MBTA) authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it is unlawful, except as permitted by regulations, "to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, [...] any migratory bird, or

¹ Ibid.			

any part, nest, or egg of any such bird" (16 USC Section 703(a)). The Bald and Golden Eagle Protection Act is the primary law protecting eagles, including individuals and their nests and eggs. The USFWS implements the MBTA (16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). Under the Bald and Golden Eagle Protection Act's Eagle Permit Rule (50 CFR 22.26), USFWS may issue permits to authorize limited, non-purposeful take of bald eagles and golden eagles.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) regulates marine fisheries in U.S. federal waters. The Magnuson-Stevens Act was first passed in 1976 and was revised in 1996 and 2007. The purpose of the Magnuson-Stevens Act is to provide long-term biological and economic sustainability of U.S. marine fisheries.

The NMFS has regulatory authority for implementing the Magnuson-Stevens Act. The NMFS requires regional fishery management councils to develop Fisheries Management Plans (FMPs) specific to their regions, fisheries, and fish stocks. For waters off the U.S. West Coast, the Pacific Fishery Management Council has developed four FMPs, which are implemented through fisheries regulations for coastal pelagic species, groundfish species, highly migratory species, and salmon species. These FMPs also identify Essential Fish Habitat, which is broadly defined as those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.

River and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the USACE, for the construction of any structure in or over any navigable water of the United States. Regulated activities include dredging or disposal of dredged materials, excavation, filling, re-channelization and construction of any structure or any other modification of a navigable water of the United States.

Clean Water Act (CWA)

Under Section 404 of the CWA, the USACE, with U.S. Environmental Protection Agency (EPA) oversight, has authority to regulate activities that result in discharge of dredged or fill material into wetlands or other "waters of the United States" (WOTUS). Perennial and intermittent creeks are considered WOTUS if they are hydrologically connected to other jurisdictional waters. In achieving the goals of the CWA, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any discharge of dredged or fill material into jurisdictional wetlands or other jurisdictional WOTUS would require a Section 404 permit from the USACE prior to the start of work. Typically, when a project involves impacts to WOTUS, the goal of no net loss of wetlands is met by compensatory mitigation; in general, the type and location options for compensatory mitigation should comply with the hierarchy established by the USACE/EPA 2008 Mitigation Rule (in descending order): (1) mitigation banks; (2) in-lieu fee programs; and (3) permittee-responsible compensatory mitigation. Also, in accordance with Section 401 of the CWA, applicants for a Section 404 permit must obtain water quality certification from the SWRCB or appropriate RWQCB.

State Regulations

California Endangered Species Act

CESA (California Fish and Game Code Section 2050 et seq.) prohibits take of State-listed threatened and endangered species without a CDFW incidental take permit. Take under CESA is restricted to direct harm of a listed species and does not prohibit indirect harm by way of habitat modification.

Protection of fully protected species is described in California Fish and Game Code Sections 3511, 4700, 5050 and 5515. These statutes prohibit take or possession of fully protected species. Incidental take of fully protected species may be authorized under an approved Natural Communities Conservation Plan (NCCP).

Natural Community Conservation Planning Act

The Natural Communities Conservation Planning Act was established by the California Legislature, is directed by the CDFW, and is implemented by the State, as well as public and private partnerships to protect habitat in California. The Natural Communities Conservation Planning Act takes a regional approach to preserving habitat. An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Once an NCCP has been approved, CDFW may provide take authorization for all covered species, including fully protected species, Section 2835 of the California Fish and Game Code.

California Fish and Game Code Sections 3503, 3503.5 and 3511

California Fish and Game Code Sections 3503, 3503.5 and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (California Fish and Game Code Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

California Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (California Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the CDFW at least 10 days in advance of changing the land use to allow for salvage of the plant(s).

Section 1600 et seg. of the California Fish and Game Code

Section 1600 et seq. of the California Fish and Game Code prohibits, without prior notification to CDFW, the substantial diversion or obstruction of the natural flow of, or substantial change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. For these activities to occur, the CDFW must receive written notification regarding the activity in the manner prescribed by the CDFW and may require a lake or streambed alteration agreement. Lakes, ponds, perennial, and intermittent streams and associated riparian vegetation, when present, are subject to this regulation.

Porter-Cologne Water Quality Control Act

Pursuant to Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must also obtain water quality certification under Section 401 from the RWQCB. Additionally, the SWRCB and each of nine local RWQCBs have jurisdiction over "waters of the State" pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements regarding discharges to "isolated" waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the USACE to be Outside of Federal Jurisdiction). The local RWQCB implements this general order for isolated waters not subject to federal jurisdiction.

The CWA and associated federal regulations (Title 40 of the CFR 123.25(a)(9), 122.26(a), 122.26(b)(14)(x) and 122.26(b)(15)) require nearly all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more, including smaller sites in a larger common plan of development or sale, to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit for their stormwater discharges, and develop a Storm Water Pollution Prevention Plan (SWPPP). The NPDES Program is a federal program which has been delegated to the State of California for implementation through the SWRCB and RWQCBs.

California Code of Regulations (Wetlands and Waters Definition)

The State Water Board indicates that no single accepted definition of wetlands exists at the State level, and that RWQCBs may have different requirements and levels of analysis with regard to the issuance of water quality certifications. Generally, an area is a wetland if, under normal circumstances:

- 1. the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- 2. the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- 3. the area's vegetation is dominated by hydrophytes, or the area lacks vegetation.

Under California State law, waters of the State means "any surface water or groundwater, including saline waters, within the boundaries of the state." As such, water quality laws apply to both surface water and groundwater. After the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (53 USC 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State's jurisdiction over isolated wetlands. The memorandum stated that under the California Porter-Cologne Water Quality Control Act, discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using Porter-Cologne rather than CWA authority.

Local Regulations

City of Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to biological resources, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Municipal Code

Section 18.50.110 of the Pleasant Hill Municipal Code (PHMC) provides tree preservation requirements. This section is intended to encourage the preservation of trees throughout the community by establishing reasonable provisions for protecting heritage trees and other protected trees and establishing procedures for review and approval of tree removal and replacement. This section requires applicants to obtain a certified arborist report to address the health and condition of a tree, the rationale for removal, and alternatives for removal. Under the Tree Preservation section, a permit is required for the removal, relocation, trimming, or damage to a protected or heritage tree. A protected tree is defined by the PHMC as follows:

- a. Any native oak tree with a trunk diameter measurement of nine inches or larger.
- b. Any indigenous tree with a trunk diameter measurement of nine inches or larger. Indigenous trees include but are not limited to: *Alnus Oregona* (Red Alder), *Acer Macrophyllum* (Bigleaf Maple), *Aesculus Californica* (California Buckeye), *Arbutus Menziesii* (Madrone), *Umbellularia Californica* (California Bay or Laurel), *Juglans Hindsii* (California Black Walnut), *Platanus Racemosa* (California Sycamore), or *Sambucus Mexicana* (Elderberry).
- c. A non-native tree (not including Eucalyptus) with a trunk diameter measurement of 18 inches or larger. Non-native trees include species such as Sequoia Sempervirens (Coastal Redwood), Pinus Canariensis (Canary Island Pine), Pinus Halepensis (Aleppo Pine), Pinus Pinea (Italian Stone Pine), Pinus Radiata (Monterey Pine), Ulmus Americana (American Elm), Ulmus Parvifolia (Chinese Elm), Ulmus Pumila (Siberian Elm), Liquidambar Styraciflua (American Sweet Gum), Cedrus Deodara (Deodar Cedar), Cedrus Atlantica (Atlas Cedar), Fraxinus Uhdei (Shamel Ash), Fraxinus American (White Ash), Fraxinus Augustifolia (Raywood Ash), Cupressus sp. (Cypress), Morus Alba (Fruit/Fruitless Mulberry), Pistacia chinensis (Chinese Pistache), Robinia Pseudoacacia (Black Locust), Pyrus Calleryana (Bradford Pear), Cinnamomum Camphora (Camphor).
- d. Any tree shown to be preserved on an approved tentative map, development or site plan or required to be retained as a condition of approval or environmental mitigation measure.
- e. Any tree required to be planted as a replacement for an unlawfully removed tree.
- f. Any tree in the city with a trunk diameter measurement of 16 inches or more or any tree grouping in the city with at least one tree of this diameter is eligible for enrollment in the heritage tree program, with the consent of the property owner.

3.3.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Biological Resources and Agriculture and Forestry Resources.

Would the 2040 General Plan:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?
- c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?
- g) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?
- h) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- i) Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timber Production?
- i) Result in the loss of forest land or conversion of forest land to non-forest use?
- k) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

Approach to Analysis

Environmental impacts to biological, agricultural, and forestry resources have been assessed using impact significance criteria from federal, State, and local regulations. CEQA, Chapter 1, Section 21001(c) states that it is the policy of the State of California to "prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities." Environmental impacts relative to biological, agricultural, and forestry resources have been assessed using impact significance criteria set forth in the CEQA Guidelines and federal, State, and local plans, regulations, and ordinances.

Biological Resources

The analysis of impacts related to biological resources is based on review of available literature online record searches of the following databases: the CDFW CNDDB,³² the CNPS *Online Inventory of Rare, Threatened and Endangered Plants of California*,³³ the USFWS NWI,³⁴ USFWS *Critical Habitat*

³² CDFW CNDDB, op.cit.

³³ CNPS op. cit.

³⁴ USFWS NWI, op.cit.

Mapper, ³⁵ and USFWS IPaC System. Data used for this analysis are summarized in Section 3.3.1. Rincon Biologists evaluated impacts on biological resources based on the likelihood that special-status species, sensitive habitats, wildlife corridors, and protected trees are present within the General Plan area, and the likely effects of construction or operation on these resources. For the purposes of this EIR, the word "substantial" as used in the significance thresholds below is defined by the following three principal components:

- Magnitude and duration of the impact (e.g., substantial/not substantial),
- Uniqueness of the affected resource (rarity), and
- Susceptibility of the affected resource to disturbance.

Agricultural and Forestry Resources

The analysis of agricultural and forestry resources is based on review of available literature. The primary source of information reviewed to evaluate impacts in the General Plan area was the DOC FMMP database to search for documented areas of important farmland, Williamson contracts, and forestry lands. ³⁶

EIR Scoping Comments Consideration

This section also addressed comments received in response to the EIR NOP related to biological resources regulatory requirements regarding migratory birds and raptors, vegetation and/or ground disturbing activities, special-status species and nesting birds, sensitive natural communities, and creek habitats. Assessment of migratory birds and raptors and their associated nesting habitat as well as vegetation and/or ground disturbing activities that may affect these birds or other special-status species is discussed under Impact BIO-1. Assessment of impacts to sensitive natural communities and creek habitats is discussed under Impact BIO-2.

No comments relevant to CEQA were received in response to the EIR NOP specific to agricultural and forestry resources that need to be addressed in the impacts discussion.

Specific Threshold of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of Biological Resources and Agriculture and Forestry Resources impacts resulting from implementation of the proposed plan.

- Result in direct take or habitat removal or alteration for candidate, sensitive, or special-status species.
- Adversely affect any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.
- Remove, fill, or damage a federally protected wetland.
- Interrupt fish movement in an aquatic channel or impede terrestrial movement via a land corridor.
- Remove, damage, or replace trees designated as protected by the City of Pleasant Hill Tree
 Ordinance.
- Conflict with the provisions of an applicable habitat conservation plan.

³⁵ USFWS Critical Habitat Mapper, op.cit.

³⁶ DOC, op. cit.

Result in conversion of agricultural resources to non-agricultural resources.

Fish and Wildlife Service?

Result in conversion of forestry resources to non-forestry resources.

Impact Evaluation

Special-status Species

Significance Criterion a: Would the proposed plan have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S.

Impact BIO-1 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN COULD RESULT IN DIRECT OR INDIRECT IMPACTS TO SPECIAL-STATUS SPECIES OR THEIR ASSOCIATED HABITATS INCLUDING IMPACTS TO MIGRATORY BIRD NEST SITES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Construction

As indicated above in Table 3.3-1, most of the General Plan area is developed and does not provide habitat for the special-status species reported or known to occur in or near to Pleasant Hill. Areas that may provide habitat for special-status species are primarily located in the open space and undeveloped areas of the General Plan area including local parks and in riparian areas along creeks and drainages within Pleasant Hill.

As shown in Tables B-1 and B-2 in Appendix B, special-status wildlife species with the potential to occur in and near the General Plan area include, for example, California red-legged frog, California tiger salamander, Alameda whipsnake, and special-status raptors including Coopers hawk and northern harrier. Generally, these species are associated with waterways and riparian habitats along creeks and riverine features as well as open space. As such special-status species would most likely be found at the northwestern limit of the General Plan area in Paso Nogal Park, and in riparian habitats along Grayson Creek and other drainages. Additionally, the western extent of the General Plan area is immediately adjacent to federally designated critical habitat for California red-legged frog and Alameda whipsnake in the Briones Regional Park open space. Special-status plant species with the potential to occur in the General Plan area include, for example, Mt. Diablo fairy-lantern, Diablo helianthella, bent-flowered fiddleneck, big tarplant, and Condon's tarplant. These species would be expected to occur within open space areas of Paso Nogal Park and at the western edge of the General Plan area that shares connectivity with Briones Regional Park within vegetative habitat.

Areas of blue oak and valley oak woodlands would likely qualify as sensitive natural communities occurring within the General Plan area. Additionally, riparian habitat occurs along Grayson Creek, Murderer's Creek, Walnut Creek, and other drainages in the General Plan area.³⁷

The 2040 General Plan would facilitate infill development and development within Pleasant Hill. These areas are currently developed with residential and non-residential uses and do not provide habitat suitable for special-status species described above. The 2040 General Plan designates the existing Paso Nogal Park, and riparian areas along Walnut Creek and several drainages throughout the General Plan area as Park and Open Space land uses. This land use designation would prevent

³⁷ USFWS NWI Wetlands Mapper, op. cit.

substantial development of the habitat that these open space, riparian habitats, and areas of natural vegetation communities.

The 2040 General Plan would not include changes to existing Park and Open Space land use designations, including along creeks and waterways in the General Plan area. Therefore, the 2040 General Plan would not facilitate permanent development in riparian vegetation along these creeks and drainages. Because the development facilitated by the 2040 General Plan would occur as development and infill within existing developed areas, existing roads, water, and sewer are already in place and would minimize the need for construction of new utilities and infrastructure. However, the 2040 General Plan increases the allowable density that could be constructed on some infill and development sites within the General Plan area, which could require upgraded utilities. The construction of these upgraded facilities could require work within riparian vegetation along creeks and drainages in the General Plan area, resulting in potential temporary riparian and aquatic habitat impacts. These habitats could support several special-status species, such as California red-legged frog and/or California tiger salamander. Additionally, development facilitated by the 2040 General Plan could impact isolated trees and pockets of vegetation in the urbanized areas of the General Plan area. These trees and isolated pockets could provide habitat for special-status species, including migratory nesting birds.

The development facilitated under the 2040 General Plan would be subject to the provisions of the various federal and State natural resources regulations and their respective permitting processes. Additionally, the 2040 General Plan contains goals and policies that call for the preservation and protection of natural resources and the managed production of natural resources. These goals and policies, listed below, would reduce impacts to special-status species and their habitats.

Goal ENV-4 Protect and preserve natural habitat, plants, and wildlife.

- **Policy ENV-4.1 Minimize Development Impacts.** Require new development and construction activities to minimize impacts and disturbances on plants and animals, including sensitive habitat and migration corridors, landforms, and trees.
- **Policy ENV-4.2** Natural Habitat Protection. Preserve, protect, and improve remaining natural habitats, sensitive habitats for special status species, waterways, and wetlands.
- **Policy ENV-4.4 Biological Resources Assessment.** Require that applicants for development projects proposed to be in or adjacent to critical habitat areas to complete a site-specific biological resources assessment as part of the development review process and modify designs or add mitigations to reduce potential impacts.
- **Policy ENV-4.5 Special Status Species Protection.** Cooperate with State and Federal agencies to ensure that new development does not substantially affect any special status species on State or Federal rare, endangered, or threatened species lists.

The policies listed above would prevent loss of special-status wildlife habitat in the open space areas throughout the General Plan area. Policies ENV-4.1 and ENV-4.2 would require new development to minimize impacts to sensitive biological resources and protect sensitive habitats for special-status species. Policy ENV-4.2 would specifically require preservation, protection and improvement of all habitats for special-status species as defined above under Section 3.3.1, *Environmental Setting*, which includes species listed under the ESA and CESA, plants listed as rare by CDFW, animals

designated as "Species of Special Concern," "Fully Protected," or "Watch List" by CDFW, and plants ranked as CRPR 1 or 2. Policy ENV-4.4 would require applicants for development projects near critical habitats to complete a site-specific biological resources assessment that analyzes the impacts of the project to all special-status species and their habitats and provides mitigation to reduce those potential impacts. Additionally, Policy ENV-4.5 requires new development to cooperate with State and federal agencies to ensure that rare, endangered, or threatened species are not substantially affected by project activities. These requirements for special-status habitat and species protection as well as biological resources assessments prior to the approval of new development within the General Plan area would ensure that potential special-status species that could be impacted by future development would be identified and potential impacts would be reduced or avoided. Therefore, implementation of these policies would avoid potential direct impacts to sensitive species identified above under Section 3.3.1.d.

While the policies above would prevent impacts to large tracts of open space that provide habitat for special-status species, as with most urbanized environments, landscape features within the urbanized areas of Pleasant Hill, such as trees, shrubs, herbaceous plants, and parklands, could serve as temporary habitats for nesting migratory birds. Migratory bird species may use the General Plan area for nesting during the breeding season and are protected under the California Fish and Game Code and MBTA. Construction-related activities such as vegetation removal, building demolition and/or relocation, grading, materials laydown, access, and infrastructure improvements, and building construction, could result in the disturbance of nesting migratory birds. The most identifiable potential direct impact to migratory bird species would involve the removal of vegetation, particularly trees and landscaping shrubs that may serve as perching or nesting sites for migratory birds. These adverse effects on listed or special-status bird species would represent a potentially significant impact. However, implementation of Mitigation Measure BIO-1 (conduct preconstruction bird surveys and implement avoidance measures prior to removal) would be required for future projects where mature trees and other habitat are present and construction activities are scheduled from early spring to late summer.

Special-status bats such as pallid bat, Townsend's big-eared bat, and big free-tailed bat are State SSCs and have potential to occur within the General Plan area. Pallid bats are found in grasslands, shrublands, woodlands, and forests, and may roost in trees or buildings. Townsend's big-eared bat and big free-tailed bats are found in a wide variety of habitats and may roost in abandoned buildings or large trees. Bats prefer open areas or areas under a tree canopy for foraging, and often roost near water. Although the General Plan area is primarily developed, large trees, abandoned structures, and buildings in Pleasant Hill provide suitable roosting habitat for special-status bat species. Disturbance of maternity roosts by construction activities resulting in roost destruction or abandonment would be a potentially significant impact to bat species and would potentially constitute violations of the California Fish and Game Code. Such adverse effects on special-status bats would be a potentially significant impact. However, implementation of Mitigation Measure BIO-2 (conduct pre-construction roosting bat surveys and implement avoidance measures prior to removal) would be required for future 2040 General Plan projects where trees, abandoned structures, or other habitat for roosting bats is present and construction activities may occur during seasonal periods of bat activity. Therefore, 2040 General Plan construction impacts related to special-status species would be less than significant with mitigation.

Operation

Given that potential impacts to special-status species would occur during construction either directly or indirectly related to habitat modification, there would be no 2040 General Plan operational impacts related to biological resources.

Mitigation Measures

MITIGATION MEASURE BIO-1 ADD A GENERAL PLAN PROGRAM TO CONDUCT PRE-CONSTRUCTION BIRD SURVEYS AND IMPLEMENT AVOIDANCE AND MINIMIZATION MEASURES

The City shall add a 2040 General Plan Environment Element Program to include the following requirements for nesting bird surveys, avoidance, and minimization measures:

For construction activities initiated during the bird nesting season (February 1 – September 15) involving removal of vegetation that could potentially serve as habitat for special-status bird species or other nesting bird habitat, including abandoned structures and other man-made features, a preconstruction nesting bird survey shall be conducted no more than 14 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot and shall include a buffer around the construction site at a distance determined by a qualified biologist. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in California Bay Area communities (i.e., qualified biologist). If nests are found, an avoidance buffer shall be determined by a qualified biologist dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be submitted to the City prior to the commencement of construction activities.

Future project site plans shall include a statement acknowledging compliance with the federal MBTA and California Fish and Game Code that includes avoidance of active bird nests and identification of Best Management Practices to avoid impacts to active nests, including checking for nests prior to construction activities during February 1 to September 15 and what to do if an active nest is found so that the nest is not inadvertently impacted during grading or construction activities.

MITIGATION MEASURE BIO-2 ADD A GENERAL PLAN PROGRAM TO CONDUCT PRE-CONSTRUCTION ROOSTING BATS SURVEYS AND IMPLEMENT AVOIDANCE MEASURES PRIOR TO REMOVAL

The City shall add a 2040 General Plan Environment Element Program to include the following requirements for roosting bat surveys and avoidance measures prior to removal:

Prior to the removal or alteration of trees and structures that may serve as roosting habitat for special-status bat species, a qualified biologist shall conduct a focused survey of all trees and structures to be removed or impacted by construction activities to determine whether active roosts

of special-status bats are present on site. Tree or structure removal shall be planned for either the spring or the fall and timed to ensure both suitable conditions for the detection of bats and adequate time for tree and/or structure removal to occur during seasonal periods of bat activity exclusive of the breeding season, as described below. Trees and/or structures containing suitable potential bat roost habitat features shall be clearly marked or identified. If no bat roosts are found, the results of the survey will be documented and submitted to the City within 30 days of the survey, after which no further action will be required.

If day roosts are present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the City's approval. The plan shall incorporate the following guidance as appropriate:

- When possible, removal of trees/structures identified as suitable roosting habitat shall be conducted during seasonal periods of bat activity, including the following:
 - a) Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs.
 - b) Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs.
- If a tree /structure must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures that consist of (or exceed) the following:
 - a) If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure.
 - b) If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31).
- Tree removal procedures shall be implemented using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two.
- Prior to the demolition of vacant structures within the project site, a qualified biologist shall conduct a focused habitat assessment of all structures to be demolished. The habitat assessment shall be conducted enough in advance to ensure the commencement of building demolition can be scheduled during seasonal periods of bat activity (see above), if required. If no signs of day roosting activity are observed, no further actions will be required. If bats or signs of day roosting by bats are observed, a qualified biologist will prepare specific recommendations such as partial dismantling to cause bats to abandon the roost, or humane eviction, both to be conducted during seasonal periods of bat activity, if required.
- If the qualified biologist determines a roost is used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultation with CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is

determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.

Level of Significance

Less than significant with mitigation

Sensitive Natural Communities

Significance Criterion b: Would the proposed plan have a substantial adverse effect on any

riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of

Fish and Wildlife or U.S. Fish and Wildlife Service?

Significance Criterion c: Would the proposed plan 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?

Impact BIO-2 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN COULD ADVERSELY IMPACT RIPARIAN HABITAT, OTHER SENSITIVE NATURAL COMMUNITIES, OR PROTECTED WETLANDS IN THE GENERAL PLAN AREA. IMPLEMENTATION OF FEDERAL, STATE, AND LOCAL REGULATIONS AND POLICIES WOULD ENSURE RIPARIAN HABITAT AND WETLANDS ARE NOT SIGNIFICANTLY IMPACTED. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Riparian habitats have been recorded in and around the General Plan area. According to the NWI database (see Figure 3.3-2), areas of freshwater forested/shrub wetland occur in the eastern part of the General Plan area along Walnut Creek. Additionally, several riverine features occur throughout the General Plan area including Grayson Creek, Murderers Creek, and in drainage canals running throughout Pleasant Hill. Development facilitated by the 2040 General Plan that would be located near or be bisected by waterways and other tributaries and drainages throughout the General Plan area, would be potentially subject to USACE, CDFW, and RWQCB permitting requirements.

Most of the development facilitated by the 2040 General Plan would be located on infill sites that are already developed with structures and/or parking and are not proximate to wetlands or waterways. Because these areas are urbanized and currently developed, they are unlikely to contain jurisdictional wetlands or other surface waters and associated riparian vegetation zones. However, the infill development facilitated by the 2040 General Plan would increase density in some areas, which could require upgraded utilities or stormwater drainage. The construction of these upgraded facilities could require work, including dredge or fill, within jurisdictional wetlands and streams and could require ground disturbance in riparian habitat associated with these wetlands and streams. For development that would occur in these areas, an aquatic resources delineation would be required to identify the limits and potential jurisdiction of protected waters, wetlands, and sensitive natural communities. Therefore, any proposed development in areas identified as jurisdictional waters and/or wetlands, streambed/banks, or riparian vegetation would be subject to the permit requirements of the USACE, RWQCB, and CDFW, pursuant to Section 404 and 401 of CWA, the Porter-Cologne Water Quality Control Act, and/or California Fish and Game Code Section 1600 et

³⁸ USFWS NWI Wetlands Mapper, op. cit.

seq. Actual jurisdictional areas are determined by the State and federal authorities at the time that permits are requested.

Reasonably foreseeable development within or adjacent to sensitive habitats could result in potential direct impacts through removal of vegetation, filling of wetland habitat, runoff of pollutants into riparian habitats or wetlands, compaction of soils, and/or indirectly through dust and vegetation thinning. The issuance of a grading permit by the Director of Public Works and Community Development for ministerial and discretionary projects requires obtaining other permits required by State or federal agencies. These include but are not limited to streambed alteration permits from the CDFW and permits for grading in the vicinity of wetlands and certain watercourses from the USACE and RWQCB. These permit clearances may also be required as conditions of approval for grading work to commence. Approval of permits also requires findings that the proposed grading will not result in erosion, stream sediment, or other adverse off-site effects to riparian habitat.

On future project sites one acre or larger, implementation of the required Stormwater Pollution Prevention Plan Best Management Practices, in accordance with the NPDES construction general permit, during project construction would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event. Additionally, PHMC Section 15.10.280 provides design standards to address erosion and sedimentation. Future developments facilitated by the 2040 General Plan would employ erosion and stormwater control measures as outlined in the PHMC Chapter 15.05, *Stormwater Management and Discharge Control*, to protect and enhance the water quality in the city's watercourses pursuant to, and consistent with, the Porter-Cologne Water Quality Control Act and the CWA. Additionally, this chapter carries out the conditions in the city's NPDES permit that require appropriate source control and site design measures and stormwater treatment measures for projects that replace or create greater than 10,000 square feet of impervious surface (as amended August 15, 2006). Impacts related to drainage and pollution are further discussed in Section 3.8, *Hydrology and Water Quality*.

The 2040 General Plan contains goals and policies that would further reduce impacts to riparian and wetland habitats. The following goal and policies address development in or near riparian habitat:

Goal ENV-2 Protect the quality of water resources in Pleasant Hill.

- **Policy ENV-2.6 Creek Preservation.** Creek setbacks, where feasible, should exceed minimum regulatory setback guidelines to protect native vegetation and enhance creek environments.
- **Policy ENV-2.7 Watercourse Preservation.** Preserve natural watercourses or provide naturalized drainage channels within the city. Where feasible, implement restoration and rehabilitation opportunities.
- **Policy ENV-2.8** Creek Clean-up. Collaborate with local and regional agencies, businesses, property owners, and organizations proactively to reduce litter, illegal dumping, and reestablish native vegetation along local creeks and waterways.

Goal ENV-3 Preserve and restore streams, wetlands, and riparian areas to function as open space and wildlife corridors.

- Policy ENV-3.1 Creek Protection Zone Establishment for New Development. Establish creek protection zones for creeks that extend a minimum of 25 feet (measured from the top of a bank and a strip of land extending laterally outward from the top of each bank), with wider buffers where significant habitat areas or high potential wetlands exist. The City shall prohibit development within creek protection zones, except as part of greenway enhancement, including habitat conservation, bike and walking paths, wildlife habitat, and native plant landscaping. City approval is required for the following activities within the creek protection zones:
 - 1. Construction, alteration, or removal of any structure;
 - 2. Excavation, filling, or grading;
 - 3. Removal or planting of vegetation (except for removal of invasive plant species); or
 - 4. Alteration of any embankment.
- **Policy ENV-3.2** Creek Contamination and Sedimentation Prevention. Require new development to use site preparation, grading, and construction techniques that prevent contamination and sedimentation of creeks and streams.
- **Policy ENV-3.3 Creek Bank Stabilization.** Require new development proposals to include appropriate measures for creek bank stabilization, and any additional steps necessary to reduce erosion and sedimentation but preserve natural creek channels and riparian vegetation.
- **Policy ENV-3.4 Stream, Wetland, and Riparian Reclamation.** Reclaim degraded streams, wetlands, riparian areas, and wildlife migration corridors, where possible, in cooperation with the Flood Control District, and other local and regional organizations.
- **Policy ENV-3.5** Reclamation with New Development. Require new development adjacent to creek protection zones to encourage the reclamation of adjacent creeks, wetlands, and riparian areas.
- **Policy ENV-3.6** Natural Stream Corridor Retention and Improvement. Actively support the use of natural waterways within the city. The City will actively work to avoid any new channelization of creeks and waterways within the city and shall work with regional agencies to restore channelized sections to a more natural channel, where feasible.
- Policy ENV-3.7 Erosion Control Plans. Require erosion control plans for new development that require significant grading or are near streams, wetlands, and riparian areas. The plans shall include recommendations for grading practices that prevent erosion, loss of topsoil, and scour of drainageways, consistent with biological and aesthetic values.
- **Policy ENV-3.8 Educational and Research Access.** Work with public and private landowners adjacent to creeks to allow access to creeks, waterways, and riparian areas for educational and research programs.

Policy ENV-3.9 Restoration and Creek Maintenance. Encourage all landowners in the city to remove invasive species, plant native plant species, and prevent pollution from entering local creeks and waterways.

Environment Element Implementation Programs

Program H Creek Restoration Funding. Seek regional, State, and federal funding sources to reclaim, restore, and enhance local creeks and waterways in order to:

- Reduce embankment erosion and deterioration;
- Clearing debris to maintain free flowing waterways; and
- Stabilize and restore stream banks through the planting of new vegetation.

Implementation of these goals and policies, as well as Policy ENV-4.1 and ENV-4.2 described under Impact BIO-1, would reduce direct impacts to waters, wetlands and riparian areas during construction and operation by reducing direct and indirect modifications to creeks, embankments, and other waterways in the General Plan area. Furthermore, if potentially jurisdictional waters occur on any site identified by the 2040 General Plan for development, an aquatic resources delineation and permits issued by the relevant State and/or federal authorities (USACE, RWQCB, and CDFW) would be required that would address potential impacts to those waters. Additionally, under Implementation Program H, the City of Pleasant Hill is required to seek sources of funding to reclaim, restore, and enhance local creeks and waterways within the General Plan area, thus further improving these resources for the future. Adherence to State and federal regulations, the PHMC, and implementation of proposed 2040 General Plan goals and polices would result in a 2040 General Plan sensitive natural community construction impact that is less than significant.

Operation

Given that potential impacts to riparian habitats and wetlands would occur during construction either directly via fill or indirectly related to habitat modification, there would be no 2040 General Plan operational impacts related to sensitive natural communities.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Wildlife Movement Corridors

Significance Criterion d: Would the proposed plan 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?

Impact BIO-3 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD AVOID IMPACTS TO WILDLIFE MOVEMENT CORRIDORS BY CONSERVING OPEN SPACE AREAS IN THE GENERAL PLAN AREA, AS DIRECTED BY POLICIES IN THE 2040 GENERAL PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Most of the General Plan area is developed and urbanized and does not provide for wildlife movement corridors. Wildlife movement corridors in the General Plan area are generally limited to riparian corridors and creeks and areas of open space in local and regional parks. These creeks may be used by migratory fish and riparian corridors and other undeveloped areas in the city may provide corridors for wildlife movement, including migratory birds and Alameda whipsnake, California tiger salamander, and California red-legged frog when migrating to aquatic breeding habitat and during juvenile dispersal. The 2040 General Plan does not include changes to existing Parks and Open Space land use designations, including along creeks and waterways in the General Plan area. As such, the 2040 General Plan would not facilitate permanent development within these wildlife movement corridors. Wildlife movement within areas of open space would not be affected by the 2040 General Plan, because the 2040 General Plan facilitates development in the urbanized areas of Pleasant Hill.

The 2040 General Plan would focus on infill development along corridors and on parcels currently developed with structures and/or parking lots. Additionally, proposed 2040 General Plan Goal ENV-3, listed above under Impact BIO-2, addresses preservation and restoration of habitats that may serve as open space and wildlife corridors. Under this goal, several policies listed above under Impact BIO-2 require development setbacks along creek protection zones, riparian areas, wetlands, and other areas that function as fish and wildlife movement corridors. Implementation Program H, listed above, supports restoration of local creeks and waterways that would restore wildlife movement corridors provided by streams. Proposed 2040 General Plan Policy ENV-3.4 and ENV-3.5, also listed above under Impact BIO-2, require new development adjacent to creek protection zones to reclaim, retain, and improve streams, wetlands and riparian areas, and wildlife movement corridors, where possible. These policies would help to preserve important local wildlife corridors as new development is permitted throughout the General Plan area.

Furthermore, proposed 2040 General Plan Goals OSP-1 and ENV-4 and associated policies would provide for a connected open space network that in turn could facilitate wildlife movement.

Goal OSP-1 Preserve, enhance, and protect a continuous system of open space areas, hillsides, and natural features.

Policy OSP-1.1 Open Space Preservation. Keep open space and undeveloped hillsides free of future development.

Policy OSP-1.4 Connected Open Space Areas. Integrate, wherever possible, the local open space and parks systems with the open space systems of nearby communities and the region to create and preserve a continuous and connected system of open space areas.

Goal ENV-4 Protect and preserve natural habitat, plants, and wildlife.

Policy ENV-4.3 Fish Bypass Facilities. Support efforts of the County to determine the feasibility of constructing fish bypass facilities for flood control drop structures in area creeks.

Considering that the 2040 General Plan would not facilitate development in open space areas, including stream corridors, and that it contains policies to reduce impacts to stream corridors and protect wildlife movement corridors and open space, 2040 General Plan construction impacts related to wildlife movement corridors would be less than significant.

Operation

Given that potential impacts to wildlife movement corridors would occur during construction either directly via fill or indirectly related to open space development, there would be no 2040 General Plan operational impacts related to wildlife movement corridors.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Local Biological Resources Policies or Ordinances Consistency

Significance Criterion e:	Would the proposed plan conflict with any local policies or ordinances
	protecting biological resources, such as a tree preservation policy or
	ordinance?

Impact BIO-4 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD BE REQUIRED TO CONFORM WITH APPLICABLE LOCAL POLICIES AND ORDINANCES PROTECTING BIOLOGICAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Development facilitated by the 2040 General Plan would occur on parcels that have mature street trees along their boundaries and sometimes have mature trees on the project site. Removal or alteration of these trees would be subject to the City's Tree Preservation Ordinance codified in PHMC section 18.50.110. This section addresses the preservation of trees throughout the community and establishes provisions for protecting heritage trees and other "protected trees". Additionally, this section establishes the procedures for review and approval of tree removal and/or replacement and requires applicants to retain a certified arborist report when applying for a tree removal permit.

Development facilitated by the 2040 General Plan would be required to comply with PHMC Section 18.50.110 for the preservation of heritage and protected trees throughout the community. This section provides standards for the planting, pruning, removal, alteration, or any other work on a street tree as well as requirements for a tree removal permit and replacement plantings for any protected tree that would be removed during project construction. In addition to requiring tree removal permits, PHMC Section 18.50.110 requires measures to protect existing trees during project construction during specific grading activities.

Additionally, the following proposed 2040 General Plan policies and implementation program would help protect trees and other vegetation in the General Plan area:

- **Policy ENV-4.6 Urban Forestation.** Increase urban forestation by promoting urban site design that retains existing trees and includes native species, reducing the urban heat island effect.
- **Policy ENV-9.6 Urban Tree Canopy**. Encourage discretionary development to include the planting of shade trees on each property and within parking areas to reduce the retention and radiation of heat.
- Policy PFS-3.1 Grow the Urban Forest. The City shall update the City's Tree Inventory and Management Report and adopt an associated implementation plan to support opportunities to grow the urban forest by planting new trees, managing and caring for publicly-owned trees, and working to retain healthy trees.
- **Policy PFS-3.2** Reduce Urban Forest Loss. The City shall support the identification and removal of aging or diseased trees near the end of their lifespan to prevent potential hazards and should support succession plantings to reduce net loss to the urban forest.

Environment Element Implementation Programs

Program J Tree Planting and Maintenance Strategy. Prepare and update as necessary the tree planting and maintenance strategy to reduce ambient air temperature on hot sunny days. This plan should be reviewed and updated, as appropriate.

Implementation of these policies and implementation program would require protection of street trees and the urban forest consistent with the PHMC. Development facilitated by the 2040 General Plan would be required to comply with the PHMC requirements and 2040 General Plan policies and implementation program listed above. Therefore, 2040 General Plan construction impacts related to consistency with local biological resources policies and ordinances would be less than significant.

Operation

Given that potential impacts to trees would occur during construction, there would be no 2040 General Plan operational impact related to consistency with local biological resources policies and ordinances.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Habitat or Natural Community Conservation Plans Consistency

Significance Criterion f: Would the proposed plan conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or

other approved local, regional, or state habitat conservation plan?

Impact BIO-5 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT CONFLICT WITH AN ADOPTED HCP, NCCP, OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN. NO IMPACT WOULD OCCUR.

Construction and Operation

There are no adopted HCPs or NCCPs within Pleasant Hill (the General Plan area). ³⁹ As such, there are no HCPs or NCCPs applicable to the 2040 General Plan. Therefore, development construction facilitated by the 2040 General Plan and operational implementation of General Plan policies would result in no impacts related to consistency with an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

Farmland Conversion and Williamson Act Ioning Consistency

Significance Criterion g: Would the proposed plan convert Prime Farmland, Unique Farmland, or

Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of

the California Resources Agency, to non-agricultural use?

Significance Criterion h: Would the proposed plan conflict with existing zoning for agricultural use

or a Williamson Act contract?

Significance Criterion k: Would the proposed plan involve other changes in the existing

environment which, due to their location or nature, could result in

conversion of Farmland to non-agricultural use?

Impact BIO-6 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT CONVERT PRIME FARMLAND, UNIQUE FARMLAND, OR FARMLAND OF STATEWIDE IMPORTANCE (FARMLAND) TO NON-AGRICULTURAL USE NOR CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT. NO IMPACT WOULD OCCUR.

Construction and Operation

The General Plan area is almost entirely designated as Urban and Built-Up Land area. ⁴⁰ A small parcel along Taylor Boulevard in the western portion of Pleasant Hill (the General Plan area) is

³⁹ USFWS. 2022d. Environmental Conservation Online System: Habitat Conservation Plans. https://ecos.fws.gov/ecp/report/conservation-plans-region-summary?region=8&type=HCP (accessed September 2022).

⁴⁰ DOC, op. cit.

designated as Prime Farmland, Farmland of Statewide Importance, and Grazing Land. Additionally, Paso Nogal Park, located within northwestern Pleasant Hill, is designated as Other Land, which includes land not categorized in another mapping class. 41 However, these areas designated as farmland are not planned for any zoning changes or land use changes under the 2040 General Plan. Additionally, development facilitated by the 2040 General Plan and implementation of General Plan policies would not modify Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, including the small areas designated as such within Pleasant Hill. Although these areas are classified by the DOC as farmland, no land is currently zoned for agricultural uses within Pleasant Hill. 42 These areas are also not being considered as housing opportunity site locations per the 2040 General Plan Housing Element. As such, development facilitated by the 2040 General Plan would not be located on agricultural land. Finally, no land within the General Plan area is currently under a Williamson Act contract. 43 As such, the proposed plan would not conflict with agricultural zoning or Williamson Act contracts for preservation of agricultural use. Therefore, development construction facilitated by the 2040 General Plan and operational implementation of General Plan policies would result in no impacts related to conversion of agricultural uses to non-agricultural uses or Williamson Act zoning consistency.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

Forest Land Conversion and Forest/Timberland Zoning Consistency

Significance Criterion i: Would the proposed plan conflict with existing zoning for, or cause

rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government

Code Section 51104(g))?

Significance Criterion j: Would the proposed plan result in the loss of forest land or conversion of

forest land to non-forest use?

Significance Criterion k: Would the proposed plan involve other changes in the existing

environment which, due to their location or nature, could result in

conversion of forest land to non-forest use?

Impact BIO-7 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT RESULT IN THE CONVERSION OF LAND USED FOR FORESTRY PURPOSES NOR CONFLICT WITH EXISTING ZONING FOR FORESTRY OR TIMBERLAND USE. NO IMPACT WOULD OCCUR.

⁴¹ Ibid.

⁴² Pleasant Hill, City of. 2022. City of Pleasant Hill Zoning Map. https://www.pleasanthillca.org/DocumentCenter/View/276/Zoning-Map?bidld= (accessed October 2022).

⁴³ Contra Costa, County of. 2017. 2016 Agricultural Preserves Map (Contra Costa County, California). https://www.contracosta.ca.gov/DocumentCenter/View/882/Map-of-Properties-Under-Contract?bidId= (accessed October 2022).

Construction and Operation

2040 GENERAL PLAN

Pleasant Hill (the General Plan area) does not contain land identified as forested or timber area. As such, development facilitated by the 2040 General Plan would not result in or promote the conversion of land used for forestry or timber purposes. In addition, no land within the General Plan area is currently zoned as forest/timberland. As such, the proposed plan would not conflict with forest/timberland zoning for preservation of forestry use. Therefore, development construction facilitated by the 2040 General Plan and operational implementation of General Plan policies would result in no impacts related to conversion of forestry uses to non-forestry uses or forest/timberland zoning consistency.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

3.3.5 Cumulative Impacts

The geographic scope of the cumulative biological, agriculture, and forestry resources analysis is the General Plan area and the immediate vicinities in adjacent cities and in unincorporated Contra Costa County. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Concord, Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County, in addition to the proposed plan.

Special-status Wildlife and Plant Species

Most of the cumulative plans and project would be located in a highly developed urban area that has limited potential to support special-status wildlife and plant species. There are waterways that provide habitat for riparian species of flora and fauna, the closest of which is Walnut Creek. In addition, there are various open space areas throughout Pleasant Hill and the surrounding area, including Briones Regional Park to the west and Las Juntas Open Space Park and Paso Nogal Park that display grassland and woodland habitats. Riparian areas and the open space grasslands within the plan areas are relatively small and generally isolated areas surrounded by urban development. Cumulative plans and projects listed in Table 3-1 consist predominantly of general plan buildouts including commercial and residential development, area plan buildout, and active transportation projects. Development and projects planned within the cumulative projects area would occur in similar, disturbed habitat common in urban areas. However, due to the presence of habitat for some special-status species in and near Pleasant Hill, including the California red-legged frog, California tiger salamander, and Alameda whipsnake, these species also have the potential, albeit low, to occur within the cumulative projects area. Additionally, nesting birds protected by the MBTA, and special-status bat species have the potential to occur within the plan area's surroundings. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact nesting birds and protected bat species. While there are isolated pockets of natural habitat that can support special-status wildlife and plant species, the urban and built-up nature of the General Plan area as well as the other

cumulative plan and projects area precludes the possible adverse cumulative impacts to biological resources related to special-status wildlife and plant species. Therefore, the cumulative impact related to special-status wildlife and plant species would be less than significant.

Sensitive Natural Communities

Pleasant Hill contains several protected aquatic features and smaller riparian areas that would be considered wetlands and/or sensitive natural communities. These features are relatively small and often isolated from each other by large, urban developments. To address possible cumulative impacts to sensitive natural communities and wetlands, the 2040 General Plan includes several policies under proposed 2040 General Plan Goals ENV-2 and ENV-3 to address these issues and to avoid impacts to water resources including creeks, rivers, and their associated riparian areas. Most planned developments in the cumulative projects area are designed to address future growth problems, prevent urban sprawl, and minimize developmental impacts to sensitive natural communities. This is accomplished by designing projects to occur in previously developed or highly disturbed areas that the characteristics of lack sensitive natural communities or riparian habitat. Cumulative plans and projects listed in Table 3-1 consist predominantly of general plan buildouts including commercial and residential development, area plan buildout, and active transportation projects. Development and projects planned within the cumulative projects area would occur in similar, disturbed habitat common in urban areas. Therefore, the cumulative impact related to sensitive natural communities and associated riparian habitat would be less than significant.

Wildlife Movement Corridors

Pleasant Hill and its surrounding vicinity contain a variety of creeks and open space areas that act as potential movement corridors for fish and wildlife, such as in riparian areas along riverine features such as Grayson or Murderers Creeks. Any future cumulative development that occurs within the General Plan area would have to take into account the potential impact to these corridors. Cumulative plans and projects listed in Table 3-1 consist of predominantly general plan buildouts including commercial and residential development, area plan buildout, and active transportation projects. Cumulative development would occur in similar, disturbed habitat common in urban areas. The areas surrounding the potential corridors within Pleasant Hill and its surroundings in the Bay Area are highly developed, further impeding the movement of species out from these areas. Additionally, the current development plans would adhere to the 2040 General Plan's open space and creek setback requirements to reduce any potential cumulative impacts to fish and wildlife movement corridors to a less then significant level. Therefore, the cumulative impact related to wildlife movement corridors would be less than significant.

Protected Trees

Development may require the removal or encroachment on certain protected trees as listed by the City of Pleasant Hill ordinances. Cumulative plans and projects listed in Table 3-1 consists of predominantly general plan buildouts including commercial and residential development, area plan buildout, and active transportation projects. Development and projects planned within the cumulative projects area would occur in similar, disturbed habitat common in urban areas. Future projects that occur in or near undeveloped areas may require an arborist report to determine the identity of trees planed for removal or encroachment. As such, the 2040 General Plan, in conjunction with other cumulative plans and projects, would be required to adhere to applicable tree ordinances and regulations set by City of Pleasant Hill and nearby Cities of Concord, Lafayette,

Martinez, Clayton, Danville, Orinda, Pittsburg, and Moraga as well as regulations in unincorporated Contra Costa County. Therefore, the cumulative impact related to protected trees would be less than significant.

Agriculture and Forestry Resources

Since there are no plan-level impacts related to agriculture and forestry resources, there would also be no cumulative impact related to agriculture and forestry resources.

Overall Level of Cumulative Significance

Less than significant

3.4 Cultural and Tribal Cultural Resources

3.4.1 Introduction

This section addresses cultural and tribal resources in the General Plan area as well as the relevant regulatory framework. This section also analyzes the potential impacts to cultural resources and tribal cultural resources anticipated to result from development and growth under the 2040 General Plan (proposed plan). Information in this section is based on archival and online research, a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC), and tribal consultation conducted by the City of Pleasant Hill.

3.4.2 Environmental Setting

Cultural Resources Definitions

The term "cultural resources" under CEQA encompasses historic, archaeological, and tribal cultural resources as well as burial sites. Below is a brief summary of each definition:

- Historical Resources: Historical resources are resources listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or identified in a historical resources survey, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. Historical resources may include eligible built environment resources of the precontact¹ or historic periods. For the purposes of this section, historical resources are associated with the recent past. Specifically in California, historical resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years of age.
- Archaeological Resources: Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Tribal Cultural Resources:** Tribal cultural resources include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.
- Burial Sites and Cemeteries: Burial sites and cemeteries are formal or informal locations where human remains have been interred.

Overall Cultural Setting

Following is a brief overview of the indigenous history, ethnographic background, and post-contact history of the General Plan area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.

Indigenous History

The City of Pleasant Hill lies within the San Francisco Bay Area archaeological region.² Milliken et al. (2007) generally divided the prehistoric chronology of the Bay Area into five periods: The Early

¹ Precontact refers to the period prior to European settler contact with Native Americans, in this case specifically in California.

² Michael J. Moratto, *California Archaeology*, (Salinas: Coyote Press, 1984).

Holocene (8,000-3,500 Before Common Era [BCE]), Early Period (3,500-500 BCE), Lower Middle Period (500 BCE to CE 430 CE), the Upper Middle Period (430-1050 CE), and the Late Period (1050 CE-contact).

It is presumed that early Paleoindian groups lived in the area prior to 8,000 BCE; however, no evidence for that period has been discovered in the Bay Area to date.³ Sites dating to this period may be submerged or deeply buried as a result of rising sea levels and widespread sediment deposition that has occurred since the Terminal Pleistocene.⁴ For this reason, the Terminal Pleistocene Period (ca. 11,700-8,000 BCE) is not discussed here.

The earliest intensive study of archaeology of the San Francisco Bay Area began with N. C. Nelson of the University of California, Berkeley, between 1906 and 1908. He documented over 400 shell mounds throughout the area. Nelson was the first to identify the Bay Area as a discrete archaeological region.⁵

EARLY HOLOCENE (8000-3500 BCE)

Archaeological evidence from the early Holocene is limited as many sites dating to this period are likely buried under Holocene alluvial deposits. The available data suggest that the Early Holocene in the San Francisco Bay Area is characterized by a mobile forager pattern and the presence of millingslabs, handstones, and a variety of leaf-shaped projectile points. Two archaeological sites (CA-CCO-696 and CA-CCO-637) that date to this period have been identified in Contra Costa County at the Los Vaqueros Reservoir. The earliest date for the Early Holocene comes from the CA-CCO-696, approximately 7000 BCE.

EARLY PERIOD (3500-600 BCE)

The Early Period saw increased sedentism with the introduction of new ground stone technologies (i.e., mortar and pestle), an increase in regional trade, and the first cut shell beads. The earliest evidence for the use of the mortar and pestle dates to 3800 BCE and comes from CA-CCO-637. By 1500 BCE, mortars and pestles had almost completely replaced millingslabs and handstones. The advent of the mortar and pestle indicates a greater reliance on processing nuts, especially acorns. Faunal evidence from various sites indicates a diverse faunal exploitation pattern based on mussel and other shellfish, marine mammals, terrestrial mammals, and birds.⁸

The earliest cut bead horizon is also associated with this period. Rectangular *Haliotis* spp. (abalone) and *Olivella spp.* (snail) beads have been identified at several Early Period sites, including CA-CCO-637, CA-SCL-832 in Sunnyvale, and CA-ALA-307 in Berkeley. These early examples of cut beads were recovered from mortuary contexts.

³ Randall Milliken et al. *California Prehistory: Colonization, Culture, and Complexity,* "Punctuated Culture Change in the San Francisco Bay Area," (Lanham: Alta Mira Press, 2007).

⁴ Brian F. Byrd and L. Mark Raab, "Prehistory of Southern Bight: Models for a New Millennium," 2007.

⁵ Moratto, California Archaeology, 1984.

⁶ Sonia Ragir, *Contributions of the University of California Archeological Research Facility*, "The Early Horizon in Central California Prehistory, (Berkeley: University of California, Berkeley, 1972) and Moratto, *California Archaeology*, 1984.

⁷ Milliken et al. "Punctuated Culture Change in the San Francisco Bay Area," 2007.

⁸ Stella D'Oro, "Native California prehistory and climate in the San Francisco Bay Area," Master's Theses and Graduate Research, (San Jose State University, 2009).

⁹ Milliken et al. "Punctuated Culture Change in the San Francisco Bay Area," 2007.

LOWER MIDDLE PERIOD (500 BCE-CE 430)

The Lower Middle Period saw numerous changes from the previous period. The presence of chipped stone points and bone tools became typical. Rectangular shell beads, common during the Early Period, disappear completely and are replaced by split-beveled and saucer Olivella beads. In addition to the changes in beads, *Haliotis* spp. ornaments, bone tools and ornaments, and basketry awls also became typical, indicating the development of coiled basketry technology. Mortars and pestles continued to be the dominant grinding tool. ¹⁰

Evidence for the Lower Middle Period in the Bay Area comes from sites such as the Emeryville shell mound (CA-ALA-309) and Ellis Landing (CA-CCO-295). CA-ALA-309 is one of the largest shell mounds in the Bay Area and contains multiple cultural sequences. The lower levels of the site, which date to the Middle Period, contain flexed burials with bone implements, chert bifaces, charmstones, and oyster shells.¹¹

UPPER MIDDLE PERIOD (430-1050 CE)

Around 430 CE, Olivella saucer bead trade networks that had been established during earlier periods collapsed and over half of known sites occupied during the Lower Middle Period were abandoned. Olivella saucer beads were replaced with Olivella saddle beads. New types of material culture appear within these sites, including elaborate, decorative blades, fishtail charmstones, new Haliotis ornament forms, and mica ornaments. Sea otter bones became more abundant, while salmon and other fish became less abundant, suggesting changes in faunal exploitation patterns from earlier periods. ¹² Excavations at CA-ALA-309 indicate that a shift from mussels to oysters to clams may have occurred, and isotopic analysis confirms that San Francisco Bay individuals shifted from hunting higher-trophic-level foods in the Early Period to gathering foods like plants and shellfish in the Middle and Upper Periods. ¹³ Subsistence analyses at various sites dating to this period indicate a diverse diet that included numerous species of fish, mammals, birds, shellfish, and plant resources that varied by location in the Bay Area. ¹⁴

LATE PERIOD (CE 1050-CONTACT)

The Late Period saw an increase in social complexity, indicated by differences in burials and an increased level of sedentism relative to preceding periods, as evidenced by mortars weighing up to 90.7 kg. ¹⁵ An increase in imported Napa Valley obsidian occurred during this time for the production of smaller points, preforms and simple flake tools. Small, finely worked projectile points of the Stockton Serrated series associated with bow and arrow technology appear around 1250 CE. Olivella shell beads disappeared and were replaced with *Olivella* lipped and spire -lopped beads in the south bay and clamshell disk beads in the north bay, where thicker and larger beads indicated higher affluence. The toggle harpoon, hopper mortar, and magnesite tube beads also appeared during this period. ¹⁶ This period saw an increase in the intensity of resource exploitation that correlates with an

¹⁰ Edward M. Luby and Mark F. Gruber, "The Dead Must be Fed: Symbolic Meanings of the Shellmounds of the San Francisco Bay Area," in *Cambridge Archeological Journal*, April 1999.

¹¹ Moratto, *California Archaeology*, 1984.

¹² Dwight D. Simons and Tim Carpenter, "Fish Remains From CA-MRN-44/H, Angel Island, Marin County, California," in *Proceedings of the Society for California Archaeology*, Vol. 21, 2009.

¹³ Edward Winslow Gifford, "Composition of California Shellmounds," in *American Archaeology and Ethnology,"* (Berkeley: University of California Press, 1916)

Gregory R. Burns et al. "Isotopic Evidence for Changing Residence Patterns Though the Middle to Late Holocene in Central California," (Chico: California State University, Chico, 2012).

¹⁴ Mark G. Hylkema, "Tidal Marsh, Oak Woodlands, and Cultural Florescence in the Southern San Francisco Bay Region," 2002.

¹⁵ Kari Lentz, "Flaked and Geound Stone Technology at CA-ALA-54: Mortar Bowls and Stockton Points," 2012.

¹⁶ Peter Von Der Porten, Katherine Dixon, and Alex Degeorgey, "Seriation of Clam Shell Disk Beads in Central California," 2014.

increase in population.¹⁷ Many of the well-known sites of earlier periods, such as the Emeryville shell mound (CA-ALA-309) and the West Berkeley site (CA-ALA-307), were abandoned, as indicated by the lack of Late Period elements. Researchers have suggested that the abandonment of these sites may have resulted from fluctuating climates and drought that occurred throughout the Late Period.¹⁸

Ethnographic Background

The 2040 General Plan area is located in the traditional tribal territory of the Bay Miwok, members of the larger Miwokan subgroup of the Utian language family inhabiting the northern area of Sherman Island surrounding Mount Diablo. Miwok subsistence practices centered on the use of acorns and of seeds as primary plant food sources and on hunting of mule deer, tule elk, pronghorn antelope, and various species of waterfowl. Hunting was done typically with a sinew-backed bow and arrow. Fishing was a particularly important activity for the Miwok, primarily with various types of nets. Seines were used in large rivers and sloughs where the pace of water flow was slow Hook and line was typically used to take sturgeon, while harpoons were the most common implement for salmon fishing. ¹⁹

The Miwok made both twined and coiled basketry, usually from willow and redbud. They also manufactured tule mats used as floor covering. Woven blankets were often made of rabbit skin strips or feathers attached to cordage woven from plant fibers. Tule balsa rafts were crafted and used to navigate rivers and sloughs.²⁰

Miwok settlements typically included thatched, conical houses and semi-subterranean earth-covered dwellings in winter, constructed by higher-status families. Houses generally had a central hearth and an earth oven for cooking purposes. Large, semi-subterranean assembly houses were constructed for use as a ritual and social gathering place. In summer, a circular brush hut was constructed for use in mourning ceremonies. Other structures included sweathouses for curing disease and purification prior to hunting, small conical structures used by menstruating women, and grinding houses built over bedrock mortars to permit food processing in inclement weather. Acorn granaries were constructed for long-term acorn storage. 21

Political organization centered on small tribelets of approximately 300 to 500 people and several distinct settlements. A chief headed each tribelet, and a representative of the chief each settlement had oversight of local affairs. Chiefs acted as advisors and managed use of natural resources by preventing trespassing on tribelet territory and determining the appropriate time to begin the acorn harvest each season. The chief also arbitrated any disputes and sanctioned the punishment of criminal offenders.

Miwok social organization followed the moiety pattern, with all living things belonging to one of two categories: land and water. Moieties were exogamous typically and played an important role in many ceremonies.²²

The Bay Miwok were exploited for labor by Mission Dolores, established in 1800 in San Francisco, and later by the Mexican land grant holders. As a direct result of the establishment of the mission

¹⁷ Moratto, California Archaeology, 1984.

¹⁸ Kent G. Lightfoot and Edward M. Luby, "Late Halocene in the San Francisco Bay Area: Temporeal Trends in the Use and Abandonment of Shell Mounds in the East Bay," 2002.

¹⁹ Richard Levy, "Eastern Miwok," in *Handbook of North American Indians, Vol. 8* (1978): 398-413.

²⁰ Levy, 1978.

²¹ Levy, 1978.

²² Levy, 1978.

system, the Bay Miwok population dramatically declined. After the establishment of the United States, the Bay Miwok were legally prevented from owning land in their traditional territories. Despite this, the Bay Miwok continue to populate the Bay Area (Milliken et al. 2009; Federated Indians of Graton Rancheria 2016).

Post-Contact History

Post-contact history for the State of California is generally divided into three periods: the Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

SPANISH PERIOD (1769 – 1822)

Spanish explorers made sailing expeditions along the coast of California between the mid-1500s and mid-1700s. Juan Rodriguez Cabrillo in 1542 led the first European expedition to observe what was known by the Spanish as Alta (upper) California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements.²³ The Spanish crown laid claim to Alta California based on the surveys conducted by Cabríllo and Vizcaíno.²⁴

By the 18th century, Spain developed a three-pronged approach to secure its hold on the territory and counter against other foreign explorers. The Spanish established military forts known as presidios, as well as missions and pueblos (towns) throughout Alta California. The 1769 overland expedition by Captain Gaspár de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. Portolá established the Presidio of San Diego as the first Spanish settlement in Alta California in 1769. Franciscan Father Junípero Serra also founded Mission San Diego de Alcalá that same year, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

Construction of missions and associated presidios was a major emphasis during the Spanish Period in California to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns; just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles).

During this period, Spain also granted ranchos to prominent citizens and soldiers, though very few in comparison to the subsequent Mexican Period. To manage and expand their herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population, often forcibly. The missions governed the local Native Americans and sought to convert the population to Christianity. The influx of European settlers brought the local Native American

²³ Walton Bean, *California: An Interpretive History,* (New York: McGraw Hill, 1968)

²⁴ Blake Gumprecht, *The Los Angeles River: Its Life, Death, and Possible Rebirth,* (Maryland: The Johns Hopkins University Press, 1999).

²⁵ Zephyrin Engelhardt, *San Fernando Rey, the Mission of the Valley*. (Chicago: Franciscan Herald Press, Chicago, 1927a.)
Andres Resendez, *The Other Slavery: The Uncovered Story of Indian Enslavement in America*, (New York: Houghton Mifflin, 2016).

population in contact with European diseases which they had no immunity against, resulting in a catastrophic reduction in native populations throughout the State.²⁶

MEXICAN PERIOD (1822 – 1848)

Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants.²⁷

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos. Commonly, former soldiers and well-connected Mexican families were the recipients of these land grants, which now included the title to the land.²⁸

The Mexican Period ended in early January 1848, following several decisive battles against the United States. On January 10, leaders of the Pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to US Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga.

AMERICAN PERIOD (1848 - PRESENT)

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for conquered territory including the present-day states of California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of Southern California continued to increase during the early American Period. Ranchos were sold or otherwise acquired by Americans, with many subdivided into agricultural parcels or towns.

The discovery of gold in northern California in 1848 led to the California Gold Rush and California's population, particularly that of the bay area, grew exponentially. During this time, San Francisco became California's first true city, growing from a population of 812 to 25,000 in only a few years. ²⁹ During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom.

By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to pour into the state, particularly after the completion of the transcontinental railroad in 1869. By the 1880s, the railroads had established networks throughout northern California, resulting in fast and affordable shipment of goods, as well to transport new residents to the growing region.³⁰

²⁶ William McCawley, The First Angelinos: The Gabrielino Indians of Los Angeles, (Novato: Bellena Press Cooperative, 1996).

²⁷ Ramon Gutierrez et al., Contested Eden: California Before the Goldrush, (Berkeley: University of California Berkeley Press, 1998).

²⁸ Burgess Shumway, *California Ranchos*, (San Bernadino: Borgo Press, 2007).

²⁹ J.M. Guinn, "Gold! Gold! Gold! from San Francisquito! In *Los Angeles"*, *Biography of a City*, edited by John Caughey and LaRee Caughey, (Berkeley: University of California Press, 1977).

³⁰ Glenn Dumke, "The Boom of the 1880s in Southern California," Southern California Quarterly, 76, 1994.

History of Pleasant Hill

Pleasant Hill is located in central Contra Costa County in an area known as the Diablo Valley. The first inhabitants of present-day Pleasant Hill were Ohlone Bay and Miwok Indians. By the midnineteenth century, the area was part of the Mexican land grant system, which allowed settlers to petition for land ownership and further displace native inhabitants.

In 1844, William Welch, an immigrant from Ireland, established Rancho Las Juntas, a land grant of 13,000 acres that included all of present-day Pleasant Hill, northwest Walnut Creek, and the eastern portion of Martinez. He and his wife, Maria Antonia Galindo, spent most of their time in the then-pueblo of San Jose, but kept their cattle on their rancho in Pleasant Hill. Following her husband's death in 1846, Maria Welch relocated to the rancho and eventually distributed the land to her heirs. The California Gold Rush brought several settlers to the area. Soon thereafter, the area was dominated by agricultural uses and became a growing farming community by the late nineteenth century. An 1893 map of Rancho Las Juntas shows that it had been divided among many families by that time and had a schoolhouse, known as Pleasant Hill School, and appears to be the first use of the name of the area. ³¹ Grains, including wheat, hay, and barley, were the predominant crops grown by the early inhabitants and were transported to markets via Pacheco Creek.

Early roads were limited to dirt roads that were difficult to pass through, especially during the winter. In 1891, the Southern Pacific Rail line (now the Iron Horse Trail) started a line through Diablo Valley. In 1911, an electric railroad passed through Pleasant Hill on its way to the Sacramento Valley. The access to new transportation brought new prosperity to the families in Pleasant Hill. Farmers could more easily sell and trade goods, children could get to school more easily, and it helped to facilitate trade around the new winery industry that was in the Hookston area of town. Early commercial development was centered at the intersection of Contra Costa and Monument Boulevards, which were two of the main roadways through the community, but no distinct downtown district emerged. 32

In the 1920s and 1930s, Pleasant Hill grew and residential developments were constructed south of Gregory Lane and west of Contra Costa Boulevard and in areas of former wineries that were shuttered during Prohibition. The connection between Contra Costa and Alameda Counties was improved with the construction of the Caldecott Tunnel in 1937, making Pleasant Hill more accessible. Immediately after World War II, the suburbanization of the Pleasant Hill area accelerated to respond to the demand for housing. As a result, by the early 1950s large tracts of former farmland had been converted to single-family residential neighborhoods, and a variety of commercial areas were also developed to support the growing post-war population. Between 1946 and 1954, single-family developments north of Gregory Lane contributed significantly to Pleasant Hill's expansion, whose population had ballooned from just 5,686 in 1950 to over 23,000 in 1960. The sponse to growing population, additional services were added, including the establishment of East Contra Costa Junior College (now Diablo Valley College), at its present location in Pleasant Hill in 1952.

Pleasant Hill had been substantially developed with residential and commercial uses when it was incorporated as a city in 1961. Its residents were generally employed by important employment centers to the west and south of Pleasant Hill, and the 1964 opening of Interstate 680 further

³¹ Adam Nilsen, *Images of America: Pleasant Hill* (Charleston, SC: Arcadia Publishing, 2007).

³² "Challenges Faced in Building the New Downtown," Pleasant Hill Downtown, https://www.pleasanthillca.org/340/Article-Continued., accessed online October 2022.

³³ United States Decennial Census

³⁴ "About DVC," Diablo Valley College, https://www.dvc.edu/about/index.html, accessed October 2022.

accelerated residential and commercial construction. Beginning in the 1980s with the construction of a new city hall, the downtown area underwent a revitalization effort that continued into the early 2000s and included new commercial, retail, and residential uses.³⁵

Pleasant Hill has traditionally been a suburban residential area dominated by single-family homes that serves important neighboring employment centers. Pleasant Hill, however, has experienced some change in recent years, as indicated by recent higher-density residential and commercial construction, particularly downtown.³⁶ As of January 2022 Pleasant Hill's population is 34,026 residents.³⁷

Existing Cultural Resources

Historical Resources in General Plan Area

A review of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and the California State Office of Historic Preservation Built Environment Directory (BERD), along with the existing (2003) Pleasant Hill General Plan reveals that there is one designated historical resource in Pleasant Hill. The Patrick Rogers Farm, inclusive of the house and a barn, is listed in the NRHP and CRHR for its association with Contra Costa County's agricultural history. The Patrick Rogers Farm comprises Pleasant Hill's only Historic Overlay District.

The existing (2003) Pleasant Hill General Plan includes a list of 17 additional properties in the General Plan area that may have historical significance but have not been evaluated and are not currently listed in any federal, State, or local register. Additionally, Contra Costa County maintains a Historic Resources Inventory (HRI) that is periodically updated with historic properties to aid the Board of Supervisors in the identification and preservation of historical resources within the county. The HRI was last updated in 2019 and includes 24 properties/sites in the General Plan area that may qualify as historical resources, pending further analysis.

Archaeological Resources in General Plan Area

The City of Pleasant Hill requested a review of the SLF and received a response from the NAHC on March 30, 2022, that indicated that the 2040 General Plan area is negative for Sacred Lands. It is known that archaeological resources have been identified within Pleasant Hill. However, information on archaeological resources is confidential and will not be further discussed here.

Tribal Cultural Resources in General Plan Area

As part of its Tribal Cultural Resource identification process pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, the City of Pleasant Hill sent letters via certified mail to sixteen Native American tribal contacts identified by the Native American Heritage Commission (NAHC) as being traditionally and culturally affiliated with the General Plan area. The tribal contacts included the following:

- Irene Zwierlein, Chairperson of the Amah Mutsun Band of Mission San Juan Bautista
- Kanyon Sayers-Roods, MLD of the Indian Canyon Mutsun Band of Costanoan
- Ann Marie Sayers, Chairperson of the Indian Canyon Mutsun Band of Costanoan

³⁵ Pleasant Hill Profile, City of Pleasant Hill , accessed online https://www.pleasanthillca.org/DocumentCenter/View/675/Pleasant-Hill-Profile?bidId=, October 2022.

³⁶ Crawford Multari & Clark Associates, 2003. "Draft Environmental Impact Report for the City of Pleasant Hill Draft General Plan." Pg 23.

³⁷ United States Decennial Census

- Monica Arellano, Vice Chairwoman of the Muwekma Ohlone Indian Tribe of the SF Bay Area
- Charlene Nijmeh, Chairperson of the Muwekma Ohlone Indian Tribe of the SF Bay Area
- Cosme Valdez, Chairperson of the Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Lloyd Matheisen, Chairperson of the Chicken Ranch Rancheria of Me-Wuk Indians
- Donald Duncan, Chairperson of Guidiville Indian Rancheria
- Katherine Perez, Chairperson of the North Valley Yokuts Tribe
- Timothy Perez, contact for the North Valley Yokuts Tribe
- Andrew Galvan, contact for the Ohlone Indian Tribe
- Dahlton Brown, Director of Administration for the Wilton Rancheria
- Steven Hutchason, THPO of the Wilton Rancheria
- Jesus Tarango, Chairperson of the Wilton Rancheria
- Kenneth Woodrow, Chairperson of the Wuksache Indian Tribe/Eshom Valley Band
- Corrina Gould, Tribal Chair of the Confederated Villages of Lisjan Nation

Additionally, two other tribal contacts were identified by the City of Pleasant Hill as having requested AB 52 consultation on plans/projects and were mailed letters via certified mail:

- Michael Mirelez, Cultural Resource Coordinator for the Torres Martinez Desert Cahuilla Indians
- Sara D. Setshwaelo, Chairwoman of the Ione Band of Miwok Indians

Under AB 52, tribes have 30 days and under the provisions of SB 18, have 90 days to respond and request consultation.

On December 5, 2022, the City received a response from Corrina Gould, Tribal Chair of the Confederated Villages of Lisjan Nation, requesting consultation with the City, and the City met with Corrina Gould and other members of the Confederated Villages of Lisjan Nation on January 18, 2023. Consultation is ongoing. To date, the City has not received any other responses for additional consultation under AB 52 or SB 18.

3.4.3 Regulatory Framework

Federal Regulations

National Historic Preservation Act

Properties which are listed in or have been formally determined eligible for listing in the NRHP are automatically listed in the CRHR. The following is therefore presented to provide applicable regulatory context. The NRHP was authorized by Section 101 of the National Historic Preservation Act and is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects. Per Code of Federal Regulations, Title 36, Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

Criterion A: Are associated with events that have made a significant contribution to the broad

patterns of our history

Criterion B: Are associated with the lives of persons significant in our past

Criterion C: Embody the distinctive characteristics of a type, period, or method of installation,

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

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or

history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined as follows:

Location: The place where the historic property was constructed or the place where the

historic event occurred

Design: The combination of elements that create the form, plan, space, structure, and

style of a property

Setting: The physical environment of a historic property

Materials: Materials are the physical elements that were combined or deposited during a

particular period of time and in a particular pattern or configuration to form a

historic property

Workmanship: The physical evidence of the crafts of a particular culture or people during any

given period in history or prehistory

Feeling: A property's expression of the aesthetic or historic sense of a particular period of

time

Association: The direct link between an important historic event or person and a historic

property

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluated significance (National Park Service 1997:41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

Archaeological Resources Protection Act

The ARPA amended the Antiquities Act of 1906 (16 USC 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of the ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include but are not limited to access to sites, use and possession of sacred objects, and freedom to worship through ceremonial and traditional rites.

Native American Graves Protection and Repatriation Act

The NAGPRA of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State Regulations

California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC §§5024.1 and 4852. The CRHR 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 (Public Resources Code, 5024.1(a)). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1(b)). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2006). Further, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2006). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

Properties are eligible for listing in the CRHR if they meet one of more of the following criteria:

- **Criterion 1:** Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- **Criterion 2:** Is associated with the lives of persons important to our past
- **Criterion 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
- **Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history

California Environmental Quality Act

CEQA GUIDELINES SECTION 15064.5(A) – CEQA DEFINITION OF HISTORICAL RESOURCES

California Public Resources Code (PRC) Section 21804.1 requires lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR and are, therefore, historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA GUIDELINES SECTION 15064.5(B) - SUBSTANTIAL ADVERSE CHANGE IN SIGNIFICANCE

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines §15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (CEQA Guidelines §15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC §21083.2[a], [b]).

CEQA GUIDELINES SECTION 15064.5(C) – EFFECTS ON ARCHAEOLOGICAL RESOURCES

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a "unique archaeological resource" as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an 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) it 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; or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (CEQA Guidelines Section 15064.5[c][4]). CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

CEQA Guidelines Section 15064.5(d) – Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the county coroner must be contacted. If the county coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the most likely descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendent communities, then under CEQA, the appropriate mitigation may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

CEQA GUIDELINES SECTION 15126.4 – CULTURAL RESOURCES MITIGATION

Section 15126.4 of the CEQA Guidelines stipulates an EIR shall describe feasible measures to minimize significant adverse impacts. In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (the Standards) is considered to be mitigated below a level of significance (CEQA Guidelines Section 15126.4(b)(1)). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (CEQA Guidelines Section 15126.4(b)(3)).

California Health and Safety Code §7050.5 – Human Remains

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

California Public Resources Code §5097.91 – Sacred Lands Inventory

Section 5097.91 of the Public Resources Code established duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. This inventory is referred to as the NAHC Sacred Lands File. Under Section 5097.9 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner. Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

California Senate Bill 18 – Tribal Consultation

California Government Code Section 65352.3 (adopted pursuant to the requirements of California Senate Bill [SB] 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005); "The intent of SB 18 is to provide 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." SB 18 refers to PRC Section 5097.9 and 5097.995 to define cultural places as:

Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9) and Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.995).

California Assembly Bill 52 – Effects on Tribal Cultural Resources

California Assembly Bill (AB) 52 expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). AB 52 further states when feasible, the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe," and meets either of the following criteria:

- a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k).
- 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 PRC Section 5024.1.
 In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, it is the intent AB 52 to accomplish all of the following:

- 1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
- 2. Establish a new category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
- Establish examples of mitigation measures for tribal cultural resources that uphold the existing
 mitigation preference for historical and archaeological resources of preservation in place, if
 feasible.
- 4. Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated (because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources).
- 5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, early in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
- 6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
- 7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
- 8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
- 9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency.

Local Regulations

City of Pleasant Hill General Plan

The current City of Pleasant Hill General Plan contains policies related to historical and cultural resources, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Municipal Code

Chapter 18.45 of the Pleasant Hill Municipal Code (PHMC) addresses Historic Districts and Cultural Resources Overlay District requirements with the intention to prevent neglect of historic or architecturally significant buildings, encourage public appreciation of the city's past, foster civic and neighborhood pride, enhance property values and increase economic and financial benefits to the city, and encourage public participation in identifying and preserving historical and architectural resources. The Historic and Cultural Resources Overlay Districts are intended to:

- a. Promote the conservation, preservation, protection, and enhancement of cultural resources, landmarks and historic districts, sites, buildings, structures and objects significant in history, architecture, archaeology, and culture which impart a distinct aspect to the city and serve as visible reminders of the city's culture and heritage;
- Deter demolition, destruction, alteration, misuse, or neglect of historically, culturally, archaeologically or architecturally significant districts, sites, buildings and objects that form an important link to the city's past;
- Encourage development tailored to the character and significance of each historic district or landmark through an historic district conservation plan that includes goals, objectives, and design standards;
- d. Provide a review process for the appropriate preservation and development of important cultural, architectural and historical resources; and
- e. Promote maintenance of a harmonious outward appearance of both historic and modern structures through complementary scale, form, color, proportion, texture and material.

An "H" historic district designation or "CR" cultural resources designation may be combined with any base zoning district and may only be adopted as an amendment to the zoning map. In addition to the criteria for amendments to the zoning map, the following criteria shall be considered in determining whether to adopt an ordinance designating an "H" historic district or "CR" cultural resources overlay district:

- 1. The area, structures or site possesses value as a visible reminder of the cultural heritage of the city.
- 2. The area, structure or site is identified with a person, group, or event that contributed significantly to the cultural or historical development of the city.

- 3. Structures within the area exemplify a particular architectural style or way of life important to the city.
- 4. Structures within the area are the best remaining examples of an architectural style in a neighborhood.
- 5. The area or its structures are identified as the work of a person or group whose work has influenced the heritage of the city.
- 6. The area or its structures embody elements of outstanding attention to architectural or landscape design, detail, materials, or craftsmanship.
- 7. The area is related to a designated historic or landmark building or district in such a way that its preservation is essential to the integrity of the building or district.
- 8. Specific evidence exists that unique archaeological resources are present.

3.4.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Cultural Resources and Tribal Cultural Resources.

Would the 2040 General Plan:

- a) Cause a substantial adverse change in the significance of a historic resource pursuant to §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?
- d) 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:
 - 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
 - 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public 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 evaluation focuses on whether implementation of the proposed plan would impact historical, archaeological, or tribal cultural resources.

Both direct and indirect impacts of the proposed plan implementation were considered for this analysis below. Direct impacts are typically associated with construction and/or ground-disturbing activities, and have the potential to immediately alter, diminish, or destroy all or part of the character and quality of a cultural resource or tribal cultural resource. Indirect impacts are typically

associated with post-project implementation conditions that have the potential to alter or diminish the setting of a cultural resource or tribal cultural resource by introducing visual intrusions on existing sites that are considered undesirable.

Historical Resources

The analysis of impacts related to historical resources is based on results of review of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and the California State Office of Historic Preservation Built Environment Directory (BERD), along with the existing (2003) Pleasant Hill General Plan. Additionally, historical aerials, maps, and available parcel assessor data were consulted. Data used for this analysis are summarized in Section 3.3.1. Rincon Architectural Historians evaluated impacts on historical resources based on the likelihood that historical structures, sites, districts, or landscapes are present (or will become present over the 18-year planning horizon) within the General Plan area, and the likely effects of construction or operation on these resources.

Archeological Resources and Human Remains

The analysis of the impacts related to archeological resources and human remains is based, in part, on the results of extensive archival and online research, and a search of the SLF that was conducted by the NAHC.

Tribal Cultural Resources

In accordance with AB 52 and SB18, the City of Pleasant Hill sent letters via certified mail to eighteen Native American tribal contacts identified by the NAHC and City of Pleasant Hill as being traditionally and culturally affiliated with the 2040 General Plan area. The results of this tribal consultation were utilized for the analysis of impact related to tribal cultural resources.

EIR Scoping Comments Consideration

This section also addressed comments received in response to the EIR NOP related to cultural and tribal cultural resources regulatory requirements. Assessment of impacts to historical resources is discussed under Impact CR-1. Assessment of impacts to archaeological resources is discussed under Impact CR-2. Assessment of impacts to human remains is discussed under Impact CR-3 and tribal cultural resources are discussed under Impact CR-4.

One comment relevant to CEQA was discussed in the response to the EIR NOP specific to tribal cultural resources. The Native American Heritage Commission (NAHC) stated that that the proposed project is subject to the requirements and provisions under Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) for tribal cultural resources. Consultation required pursuant to SB 18 and AB 52 was carried out by the City of Pleasant Hill. Results of consultation are discussed in the analysis for Impact CR-4 below.

Specific Threshold of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of cultural resources and tribal cultural resources impacts resulting from implementation of the proposed plan.

- Impair a historical resource's ability to convey its significance (i.e., affect a resource's inclusion in the NRHP or CRHR) or not adhere to the Secretary of Interior's Standards for Rehabilitation. Specifically, the significance of a historical resource would be "materially impaired" if the proposed plan could result in the following effects at or adjacent to a known historical site within the plan area:
 - Demolish or materially alter in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
 - Demolish or materially alter in an adverse manner those physical characteristics that
 account for its inclusion in a local register of historical resources... or its identification in a
 historical resources survey... unless the public agency reviewing the effects of the project
 establishes by a preponderance of evidence that the resource is not historically or culturally
 significant; or
 - Demolish or materially alter in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA. (CEQA Guidelines Section 15064.5[b][2])
- Physically damage or destroy archaeological data or human remains.
- Physically damage, destroy, or otherwise adversely impact a site, feature, place, or cultural landscape with cultural value to a California Native American tribe and that is a resource determined by the City of Pleasant Hill, 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.

Impact Evaluation

Historical Resources

Significance Criterion a: Would the proposed plan cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact CR-1 The 2040 General Plan has the potential to result in significant impacts if development carried out under the plan would cause a substantial adverse change in the significance of a historical resource. This impact would be significant and unavoidable even with mitigation.

Construction

One known historical resource that is listed in NRHP and CRHR and located within Pleasant Hill (the General Plan area) is the Patrick Rogers Farm. In addition to this known historical resource, there may be other yet unidentified resources within the General Plan area that are age-eligible for listing in the NRHP, CRHR, or locally. Although there are no specific development projects associated with the 2040 General Plan, implementation of the proposed plan would guide development extent and distribution within the General Plan area through the year 2040. The 2040 General Plan would facilitate development of residential, commercial, office, institutional, and industrial land uses that could in turn result in the conversion of existing properties and structures to new uses. With relatively limited opportunities for new development in Pleasant Hill, the 2040 General Plan

emphasizes infill and reuse development within the City limits and encourages higher-density and mixed-use projects where appropriate. Construction associated with such potential future development may include site preparation, demolition, and other construction activities.

As noted in the 2040 General Plan, there is some vacant land remaining in the General Plan area, new development opportunities and most new housing would occur on existing underutilized land and through the reuse of existing buildings. Four new land use designations would accommodate increased density within the General Plan area, particularly within the ten focus areas identified throughout the General Plan area, including Downtown Pleasant Hill. In addition, such densification could occur over an 18-year planning period through 2040, during which additional structures would become age-eligible in terms of a potential historical resource. As such, such activities have the potential to result in the physical demolition, destruction, relocation, or alteration of identified or potential historical resources.

Effects on historical resources are only knowable once a specific project has been proposed, because the effects are highly dependent on both the individual project site conditions, project activities that may alter the character of a built environment resource, and/or the characteristics of the proposed ground-disturbing activity. Demolition or other structural alteration associated with development facilitated by the 2040 General Plan has the potential to impair historical built-environment resources. Consequently, damage to or destruction of historical resources could occur as a result of development under the proposed 2040 General Plan. In order to ensure that development within the General Plan area does not have a detrimental effect on historical resources, each project would need to be assessed as it is proposed.

Proposed 2040 General Plan Environment Element Goal ENV-6 and its associated policies and implementation program, listed below, would reduce potential impacts related to historical resources.

Goal ENV-6 Maintain designated historic sites and structures.

- **Policy ENV-6.1** Community Education Work with the Pleasant Hill Library, community partners, and Contra Costa County Historical Society to obtain, maintain and display historical reference materials that provide educational background on the history of Pleasant Hill.
- **Policy ENV-6.2 Historic Structures**. Encourage the maintenance and preservation of historic structures and appropriately designate historic sites and structures.

Environment Element Implementation Programs

Program M Identify Historic and Cultural Sites. Update the historic and cultural resources survey to identify historic or cultural sites eligible for resource protection, with specific consideration of structures 45 years and older.

The goal, policies, and implementation program listed above would reduce the potential for historical resources to be adversely impacted from the development facilitated by the 2040 General Plan, but there would still be potential for development to impact historical resources. Implementation of Mitigation Measure CR-1 would reduce impacts to historical resources by identifying and evaluating significant historical resources and managing relocation, rehabilitation, or alteration in compliance with the Standards as applicable. Nonetheless, even with implementation of Mitigation Measure CR-1, existing and eligible historical resources could still be materially impaired by future development that would be carried out under the 2040 General Plan. While

Historic American Building Survey (HABS) documentation would reduce impacts to the greatest extent feasible in cases where compliance with the Standards or avoidance is not possible, legal precedent has established that such a measure cannot mitigate impacts to a level of less than significant, because the loss of historical fabric cannot be readily compensated for by commemorative mitigation.³⁸ Therefore, construction 2040 General Plan impacts related to historical resources would be significant and unavoidable with mitigation.

Operation

Given that impacts to historical resources occurs during construction, there would be no 2040 General Plan operational impact related to historical resources.

Mitigation Measures

MITIGATION MEASURE CR-1: REVISE GENERAL PLAN IMPLEMENTATION PROGRAM M TO INCLUDE

PREPARATION OF HISTORICAL RESOURCES EVALUATION PRIOR TO APPROVAL
FOR PROJECTS INVOLVING BUILDINGS 45 YEARS OR OLDER AND
IMPLEMENTATION OF MITIGATION PRIOR TO AND DURING CONSTRUCTION

The City shall revise 2040 General Plan Environment Element Program M to include that, in addition to updating the existing historical and cultural resources survey, a historical resources evaluation shall be prepared prior to approval of a project carried out under the 2040 General Plan involving the demolition or substantial alteration of a building, structure, object, or other built environment feature that is 45 years of age or older.

The City shall add further details to 2040 General Plan Program M that state the following:

- The evaluation shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualifications Standards in architectural history or history (as defined in Code of Federal Regulations, Title 36, Part 61). The qualified architectural historian or historian shall conduct an intensive-level evaluation in accordance with the guidelines and best practices promulgated by the State Office of Historic Preservation to identify potential historical resources within the proposed development site. All properties 45 years of age or older shall be evaluated within their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the City for review and concurrence. If the property is already listed in the NRHP or CRHR, the historical resources evaluation described above shall not be required.
- If historical resources are identified within the site of a proposed development, efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the Professional Qualification Standards, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources evaluation report shall also identify and specify the treatment of character-defining features and construction activities.
- Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and

³⁸ League for Protection of Oakland's etc. Historic Resources v. City of Oakland (1997) 52 Cal. App. 4th 896.

Reconstructing Historic Buildings. Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the Professional Qualification Standards. In conjunction with a development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the report shall demonstrate how a project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. Mitigation measures may include documentation of the historical resource in the form of a Historic American Building Survey (HABS) report, or equivalent. The report shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Professional Qualification Standards and submitted to the City prior to issuance of any permits for demolition or alteration of the historical resource.

Level of Significance

Significant and unavoidable with mitigation

Archaeological Resources

Significance Criterion b: Would the proposed plan cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact CR-2 The 2040 General Plan has the potential to result in significant impacts if development carried out under the plan would cause a substantial adverse change in the significance of an archaeological resource, including those that qualify as historical resources. This impact would be less than significant with mitigation.

Construction

It is presumed that archaeological resources that are eligible for inclusion in the NRHP or CRHR exist throughout Pleasant Hill (i.e., the General Plan area). Effects on archaeological resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual development site conditions and the characteristics of the proposed ground-disturbing activity. Ground-disturbing activities associated with development facilitated by the 2040 General Plan, particularly in areas that have not been studied through a cultural resources investigation, or when excavation depths exceed those previously attained, have the potential to damage or destroy previously-unknown historic or prehistoric archaeological resources that may be present on or below the ground surface. Impacts to archaeological resources are especially likely in instances where ground disturbance will occur in native soils, in historic-age fill of unknown origin, and in areas that were developed prior to the implementation of a Citywide sewer system and trash collection service. Consequently, damage to or destruction of cultural resources could occur as a result of development under the proposed 2040 General Plan. In order to ensure that development

within Pleasant Hill does not have a detrimental effect on archaeological resources, each future project would need to be assessed once the project location and design concept is available.

Although there are no specific development projects associated with the 2040 General Plan, implementation of the plan would guide development in Pleasant Hill through the year 2040. New residential, commercial, office, institutional, and industrial land uses would be implemented via new development and the conversion of existing properties to new uses. Potential future development occurring under the 2040 General Plan may include site preparation, demolition and construction activities.

Proposed 2040 General Plan Environment Element Goal ENV-5 and its associated policies, listed below, would reduce potential impacts related to archaeological resources, whether prehistoric or historic in nature.

Goal ENV-5 Protect cultural and tribal resources.

- **Policy ENV-5.1** Construction Monitoring. Require new development to monitor grading, ground-disturbing, and other major earth-moving construction activities by a qualified professional during construction in previously undisturbed areas or those with known archaeological resources.
- **Policy ENV-5.3 Cultural Resources Treatment**. Ensure that treatment of any cultural resources discovered during site grading complies with State guidelines.

Environment Element Implementation Programs

In addition, the following proposed 2040 General Plan Environment Element implementation programs would reduce potential impacts related to archaeological resources, which can include Native American resources:

- **Program K Tribal Construction Monitors.** Require tribal monitor(s) during all activities in areas with cultural resources of interest to local Native American tribes. Both monitors shall observe grading, ground-disturbing, and other earth-moving activities.
- Program L Tribal Consultation. Require the determination of the significance of the cultural resource(s) and development and implementation of any data recovery program shall be conducted by a qualified professional and in consultation with interested Native American tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated. The final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes. If Native American tribes do not accept the artifact, it shall be offered to an institution staffed by qualified professionals, as determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.
- **Program M Identify Historic and Cultural Sites.** Update the historic and cultural resources survey to identify historic or cultural sites eligible for resource protection, with specific consideration of structures 45 years old and older.

The goals, policies, and implementation programs listed above would help reduce the potential for archaeological resources to be adversely impacted by the ground-disturbing activities associated with the development facilitated by the 2040 General Plan. However, there would still be potential for development to impact archaeological resources, and those impacts would be potentially significant. However, implementation of Mitigation Measures CR-2 and CR-3 (evaluate and protect significant archaeological resources if encountered during construction associated with development under the 2040 General Plan), would reduce 2040 General Plan construction impacts related to archeological resources to less than significant with mitigation.

Operation

Given that potential impacts to archaeological resources would occur during construction, there would be no 2040 General Plan operational impact related to archaeological resources.

Mitigation Measures

MITIGATION MEASURE CR-2: REVISE GENERAL PLAN IMPLEMENTATION PROGRAM M TO INCLUDE PREPARATION OF ARCHAEOLOGICAL RESOURCES ASSESSMENT PRIOR TO PROJECT APPROVAL AND IMPLEMENTATION OF MITIGATION PRIOR TO AND DURING CONSTRUCTION

The City shall revise 2040 General Plan Environment Element Program M to include that, in addition to updating the existing historical and cultural resources survey, prior to approval of a project that involves ground disturbance activities in native or previously undisturbed soils, an archaeological resources assessment shall be prepared under the supervision of an archaeologist that meets the Secretary of the Interior's Professional Qualification Standards in either prehistoric or historic archaeology.

The City shall add further details to 2040 General Plan Program M that state the following:

- Assessments shall include a California Historical Resources Information System records search at the Northwest Information Center (NAHC) and a Sacred Lands File search maintained by the Native American Heritage Commission. The records searches will characterize the results of previous cultural resource surveys and disclose any cultural resources that have been recorded and/or evaluated in and around a project site. A Phase I pedestrian survey shall be undertaken at a project site that is on previously undeveloped land in order to locate any surface cultural materials. By performing a records search, consultation with the NAHC, and a Phase I survey, a qualified archaeologist shall be able to classify a project site as having high, medium, or low sensitivity for archaeological resources.
- If the Phase I archaeological survey identifies resources that may be affected by a project, the archaeological resources assessment shall also include Phase II testing and evaluation. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific mitigation measures shall be identified in the Phase II evaluation. These measures shall include, but would not be limited to, a Phase III data recovery program, avoidance, or other appropriate actions to be determined by a qualified archaeologist in consultation with the City and any interested Tribes, as stated in the 2040 General Plan Tribal Consultation Implementation Program outlined by Goal ENV-5. If significant archaeological resources cannot be avoided, impacts may be reduced to less-than-significant levels by filling on top of the sites rather than cutting into a cultural deposits. Alternatively, and/or in addition, a data collection program may be warranted, including mapping the location of artifacts, surface

collection of artifacts, or excavation of the cultural deposit to characterize the nature of the buried portions of sites. Curation of the excavated artifacts or samples shall occur as specified by the archaeologist in consultation with the City and any interested Tribes. As stated in the 2040 General Plan Tribal Consultation Implementation Program outlined by Goal ENV-5, the final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes. If Native American tribes do not accept the artifact, it shall be offered to an institution staffed by qualified professionals, as determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.

MITIGATION MEASURE CR-3: REVISE GENERAL PLAN GOAL ENV-5 TO INCLUDE A POLICY TO STOP WORK IN THE EVENT OF UNANTICIPATED CULTURAL RESOURCES DISCOVERIES DURING CONSTRUCTION

The City shall revise the 2040 General Plan Environment Element Goal ENV-5 to include a policy that, if cultural resources are encountered during ground-disturbing activities for a project, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology in either prehistoric or historic archaeology shall be contacted immediately to evaluate the find.

If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by a project, additional work such as excavating the cultural deposit to fully characterize its extent, and collecting and curating artifacts may be warranted to mitigate any significant impacts to cultural resources. In the event that archaeological resources of Native American origin are identified during project construction, a qualified archaeologist will consult with the City to begin Native American consultation procedures.

Level of Significance

Less than significant with mitigation

Disturbance of Human Remains

Significance Criterion c: Would the proposed plan disturb any human remains, including those interred outside of formal cemeteries?

Impact CR-3 THE DISCOVERY OF HUMAN REMAINS IS ALWAYS A POSSIBILITY DURING GROUND-DISTURBING ACTIVITIES. GROUND DISTURBANCE ASSOCIATED WITH DEVELOPMENT CARRIED OUT UNDER THE 2040 GENERAL PLAN MAY DISTURB OR DAMAGE KNOWN OR UNKNOWN HUMAN REMAINS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH ADHERENCE TO EXISTING REGULATIONS.

Construction

Human burials outside of formal cemeteries can occur in prehistoric archaeological contexts. Excavations during construction activities could have the potential to disturb these resources that could include Native American burial sites. As such, ground disturbing activities that may occur with Pleasant Hill (the General Plan area) during implementation of the 2040 General Plan have the potential to unearth previously unidentified human remains.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in PRC Section 5097. The California Health and Safety Code (Section 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protect them from disturbance, vandalism, or destruction. They also include established procedures to be implemented if Native American skeletal remains are discovered. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and established the NAHC to resolve any related disputes.

All development projects are also subject to State of California Health and Safety Code Section 7050.5, which states that, if human remains are unearthed, no further disturbance can occur until the county coroner has made the necessary findings as to the origin and disposition of the remains pursuant to the PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and make recommendations to the landowner within 48 hours of being granted access.

Furthermore, the proposed 2040 General Plan Environment Element includes the following implementation program that would reduce potential impacts related to human remains, specifically, Native American remains:

Environment Element Implementation Programs

Program L Tribal Consultation. Require the determination of the significance of the cultural resource(s) and development and implementation of any data recovery program shall be conducted by a qualified professional and in consultation with interested Native American tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated. The final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes. If Native American tribes do not accept the artifact, it shall be offered to an institution staffed by qualified professionals, as determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.

The implementation program listed above would require evaluation, protection, and tribal consultation related to human remains encountered during construction associated with development under the 2040 General Plan. As such, adherence to this implementation program as well as existing regulations discussed above would reduce the potential for human remains to be adversely impacted by ground-disturbing activities associated with development facilitated by the 2040 General Plan. Therefore, 2040 General Plan construction impacts related to human remains would be less than significant.

Operation

Given that potential impacts to human remains would occur during construction, there would be no 2040 General Plan operational impact related to human remains.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Tribal Cultural Resources

Significance Criterion d: Would the proposed plan cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is either 1) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k) or 2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Impact CR-4 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN HAS THE POTENTIAL TO IMPACT UNIDENTIFIED TRIBAL CULTURAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Construction

Ground-disturbing activities associated with future development projects under the 2040 General Plan could expose previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources and could be adversely affected by associated project construction.

The 2040 General Plan is a high-level planning document, and it remains a possibility that tribal cultural resources may be present within Pleasant Hill (the General Plan area. AB 52 and SB 18 tribal consultation, thus far, has not identified known tribal cultural resources in the General Plan area, and the SLF results received from the NAHC were negative for Sacred Lands. Adherence to the requirements of AB 52 would require tribal consultation with local California Native American Tribes prior to implementation of any future project activities that are subject to CEQA. In compliance with AB 52, a determination of whether project-specific substantial adverse effects on tribal cultural resources would occur along with identification of appropriate project-specific avoidance, minimization, or mitigation measures would be required. Future projects facilitated by the 2040 General Plan that are not subject to AB 52 shall adhere to the General Plan policies listed below, which include tribal monitoring and consultation.

The following proposed 2040 General Plan Environment Element Goal ENV-5 and its associated policy as well as implementation programs would reduce potential impacts to tribal cultural resources.

Goal ENV-5 Protect cultural and tribal resources.

Policy ENV-5.2 Consultation. Perform required consultation with the appropriate tribal organization(s) as part of projects subject to the California Environmental Quality Act (CEQA).

Environment Element Implementation Programs

Program K

Tribal Construction Monitors. Require tribal monitor(s) during all activities in areas with cultural resources of interest to local Native American tribes. The tribal monitor(s) shall observe grading, ground-disturbing, and other earthmoving activities.

Program L

Tribal Consultation. Require the determination of the significance of the cultural resource(s) and development and implementation of any data recovery program shall be conducted by a qualified professional and in consultation with interested Native American tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated. The final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes. If Native American tribes do not accept the artifact, it shall be offered to an institution staffed by qualified professionals, as determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.

The goal, policy, and implementation programs listed above would help reduce the potential for tribal cultural resources to be adversely impacted by the ground-disturbing activities associated with the development facilitated by the 2040 General Plan. However, there would still be potential for development to affect tribal cultural resources, and those impacts would be potentially significant. However, implementation of Mitigation Measure CR-4 (suspend work around tribal cultural resources identified during construction) would reduce 2040 General Plan construction impacts related to archeological resources to less than significant with mitigation.

Operation

Given that impacts to tribal cultural resources occur during construction, there would be no 2040 General Plan operational impacts related to tribal cultural resources.

Mitigation Measures

MITIGATION MEASURE CR-4: REVISE GENERAL PLAN GOAL ENV-5 TO INCLUDE A POLICY TO SUSPEND WORK AROUND TRIBAL CULTURAL RESOURCES IDENTIFIED DURING CONSTRUCTION

The City shall revise the 2040 General Plan Environment Element Goal 5 to include a policy that in the event that cultural resources of Native American origin are identified during construction of a project implemented under the 2040 General Plan, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and, thus, significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with local Native American group(s). The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but

are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.

Level of Significance

Less than significant with mitigation

3.4.5 Cumulative Impacts

The geographic scope of the cumulative cultural and tribal cultural resources analysis is the General Plan area and the adjacent areas. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Concord, Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and Unincorporated Contra Costa County in addition to the proposed plan.

Historical Resources

The combination of the proposed plan as well as other relevant plans and larger scale projects considered with the proposed plan (see Table 3-1) could potentially involve the cumulative demolition or alteration of historical resources. Although Mitigation Measure CR-1 would be required to reduce impacts to these resources to the maximum extent feasible, cumulative development could nonetheless cause the loss of built-environment historical resources. Alteration or demolition of historical resources remains a possibility throughout the plan area and immediate surroundings with potentially cumulative impacts. As such, the incremental effect of the 2040 General Plan would be cumulatively considerable. Therefore, the cumulative impact related to historical resources would be significant and unavoidable.

Archaeological and Tribal Cultural Resources

Development facilitated by the 2040 General Plan in conjunction with other nearby past, present and reasonably foreseeable future projects listed in Table 3-1 could potentially disturb areas that may contain archaeological and tribal cultural resources. While there is the potential for significant cumulative impacts to archaeological and tribal cultural resources, it is anticipated that potential impacts associated with individual cumulative projects would be addressed and mitigated on a case-by-case basis and would be subject to local and State regulations regarding the protection of such resources. Therefore, the cumulative impact related to archaeological and tribal cultural resources would be less than significant with mitigation.

Overall Level of Cumulative Significance

Significant and unavoidable

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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3.5 Geology, Soils, and Mineral Resources

3.5.1 Introduction

This section describes the existing geology, soils, and mineral resources in the region and General Plan area, as well as the relevant regulatory framework. This section also analyzes the possible impacts related to geology, soils, and mineral resources that could result from implementation of the proposed plan. Information in this section is based on review of the existing (2003) Pleasant Hill General Plan, the United States Geological Survey (USGS), and California Geological Survey, the University of California Museum of Paleontology database, Paleobiology Database, primary scientific literature, and available information from the City of Pleasant Hill.

3.5.2 Environmental Setting

Geologic Setting

Contra Costa County

Pleasant Hill is located in Contra Costa County. The northeastern part of Contra Costa County, including northern Pleasant Hill, lies within the Great Valley geomorphic province, and the western and southern portions of Contra Costa County, including southern Pleasant Hill, are in the Coast Ranges geomorphic province.¹

The Great Valley is an elongated lowland approximately 50 miles wide and 400 miles long. It is bounded to the east by the Sierra Nevada Range and to the west by the Coast Range. A relatively undeformed basin, the Great Valley rises from about sea level to approximately 400 feet in elevation at the north and south ends. The northern portion of the valley, referred to as the Sacramento Valley, is drained by the Sacramento River, while the southern portion of the valley, referred to as the San Joaquin Valley, is drained by the San Joaquin River. Consequently, the Great Valley is predominantly alluvial, flood, and delta plains formed by these two major river systems.²

The Coast Ranges extend along the majority of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County in the south and consist of northwest-trending mountain ranges and valleys. The Coast Ranges are composed of Mesozoic and Cenozoic sedimentary, igneous, and metamorphic strata. The eastern side is characterized by strike-ridges and valleys in the upper Mesozoic strata.¹

Pleasant Hill (General Plan Area)

As shown on Figure 3.5-1, the General Plan area covers the extent of the Pleasant Hill Sphere of Influence and is underlain by sedimentary rocks of Holocene, Pleistocene, Miocene, Oligocene Eocene, and Paleocene age.

¹ California Geological Survey. 2002. Note 36 – California Geomorphic Provinces. https://www.conservation.ca.gov/cgs/Documents/CGS-Note-36.pdf

² Weissmann, G.S., G.L. Bennett, and A.L. Landsale. 2005. Factors controlling sequence development on Quaternary fluvial fans, San Joaquin Basin, California, USA. p. 169-186 in *Alluvial Fans: Geomorphology, Sedimentology, Dynamics*. Geological Society of London, London, UK.

@ Vine Hill Way Concord Ave EF TE Chilpancingo 242 W TSI Tk Ter —Ter Ting Time: THE S Pleasant Hill @ Ting Gregory Ln 680 Ting Boyd Rd Qoa Tmz Oak Park Blvd Ting: Qoa Geary Rd Treat Blvd Sphere of Influence Tbr—Briones Sandstone (Miocene) Tm—Monterey Formation (Miocene) City of Pleasant Hill Tsr—San Ramon Formation (Oligocene) **Geologic Units** Tk—Kreyenhagen Formation (Eocene) Qa—Quaternary alluvium (Holocene) Tmg—Meganos Formation (Eocene) Tmz—Martinez Formation Qoa—Quaternary older alluvium (Eocene to Paleocene) (Pleistocene)

Geologic Map of General Plan Area **Figure 3.5-1**

2,000

Feet

Imagery provided by Esri and its licensors © 2022. Additional data provided by Dibblee and Minch 2005.

4,000 N

Existing Soils

Soil Types and Properties

Corrosive soils are a geologic hazard, because they react with concrete and ferrous metals, which can cause damage to foundations and buried pipelines. Expansive soils are a geologic hazard, because an increase in soil volume can exert forces on structures and, thus, damage building foundations, walls, and floors. In general, areas are susceptible to differential settlement if underlain by compressible sediments, such as poorly engineered artificial fill or loose unconsolidated alluvial sediments. When these soils dry out and shrink, structural damage can occur.

Pleasant Hill (General Plan Area)

As shown on Figure 3.5-2, the majority of the General Plan area lies atop Clear Lake Clay (Cc) soils, which are considered to be highly expansive. Other soils in the General Plan area that are considered to have moderate to high expansion potential include Alo Clay (AaE), Altamont Clay (AbE), Altamont-Fontana complex (AcF), Botella Clay Loam (BaA), Conejo Clay Loam (CeA), Conejo Clay Loam (CeB), Conejo Clay Loam (ChA), Cropley Clay (CkB), Cut and fill land – Diablo complex (CmE), Cut and fill land – Los Osos complex (CnE), Diablo Clay (DdE), Diablo Clay (DdD), Lodo Clay Loam (LcE), Los Gatos Loam (LeF), Los Osos Clay Loam (LhE), Los Osos Clay Loam (LhF), Positas Loam (PkC), Tierra Loam (TaC), Tierra Loam (TaD).

Seismicity

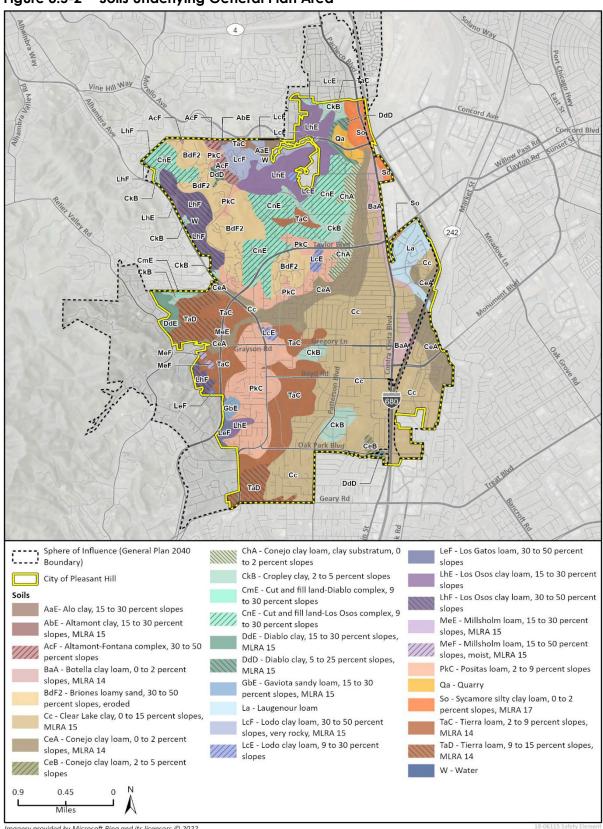
Seismic-related Hazard Types

The term seismicity describes the effects of seismic waves that are radiated from an earthquake fault in motion. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. Seismicity can result in seismic-related hazards such as fault rupture, ground shaking, and liquefaction. Faults form in rocks when stresses overcome the internal strength of the rock, and fault rupture occurs when movement on a fault breaks through to the surface and can result in damage to infrastructure and persons. Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Strong ground shaking from an earthquake can result in damage, with buildings shifted off their foundations and underground pipes being broken. Liquefaction occurs when an earthquake causes ground shaking that result in saturated soil losing shear strength, deforming, and acting like a liquid. When liquefaction occurs, it can result in ground failure that can result in damage to roads, pipelines, and buildings.

³ United States Department of Agriculture (USDA). 2018. Clear Lake Series. https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLEAR_LAKE.html (accessed November 2022)

⁴ USDA: Natural Resources Conservation Service. 2022. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed December 2022).

Figure 3.5-2 Soils Underlying General Plan Area



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18-06115 Safety Element Fig X Soils Underlying Pleasant Hill

San Francisco Bay Area

The San Francisco Bay Area contains numerous active earthquake faults. Because of the presence of nearby active faults, the San Francisco Bay Area is considered seismically active. Numerous small earthquakes occur every year in the San Francisco Bay Area, and larger earthquakes have been recorded and can be expected to occur in the future. According to the third version of Uniform California Earthquake Forecast (UCERF 3), there is an aggregated 98 percent probability of a moment magnitude 6.0 (Richter scale) or greater earthquake occurring in the plan area on an active Bay Area fault over the next 30 years.

Contra Costa County Area

Given that the San Francisco Bay Area is a region of high seismic activity, Contra Costa County has been subjected to numerous seismic events, originating both on faults within the County and in other parts of the region. Six major Bay Area earthquakes have occurred since 1800 that affected the County. These earthquakes and the originating faults include the 1836 and 1868 earthquakes on the Hayward Fault, and the 1861 earthquake on the Calaveras Fault. Two earthquakes, in 1838 and 1906, originated on the San Andreas Fault, while one earthquake (with two major shocks) occurred in 1872 and was centered in the Vacaville-Winters area of Solano County. These latter events likely occurred on a thrust fault and are not known to have been accompanied by surface fault rupture. A smaller earthquake, centered near Collinsville in Solano County on a fault of uncertain identity, occurred in 1889. The Loma Prieta earthquake, of 6.9 magnitude⁵, occurred in October 1989. The epicenter of which was located on the San Andrea fault roughly 56 miles south of San Francisco, 10 miles northeast of Santa Cruz, near Mt. Loma Prieta in the Santa Cruz Mountains.

Using the available data and information, an earthquake probability estimate has been developed for Contra Costa County and is shown in Table 3.5-1.

Table 3.5-1 Approximate Probability of Occurrence of Earthquake on Bay Area Faults

Causative Fault	Magnitude	Approximate Probability of Occurrence (over a 50-year period)
San Andreas	7.0-8.0	Likely ¹
	8.0-8.5	Intermediate ²
Hayward	6.0-7.0	Likely
	7.0–7.5	Intermediate
Calaveras	6.0-7.0	Likely
	7.0–7.5	Intermediate-Low ³
Concord	5.0-6.0	Likely
	6.0-7.0	Intermediate-Low
Antioch	5.0–6.0	Likely
	6.0-7.0	Intermediate-Low

Notes:

Source: USGS 2008

Greater than 50 percent probability of occurrence

² A 15-50 percent probability of occurrence

³ Less than 15 percent probability of occurrence

⁵ California Geological Survey (CGS). 2019. The 1989 Loma Prieta Earthquake. https://www.conservation.ca.gov/cgs/earthquakes/loma-prieta (accessed July 2022).

Pleasant Hill (General Plan Area)

Like most cities in the region, Pleasant Hill is subject to risks associated with potentially destructive earthquakes. Earthquakes are most common along geologic faults that are planes of weakness or fractures along which rocks have been displaced. There are no major faults in proximity to Pleasant Hill. The nearest major fault to Pleasant Hill is the Concord Fault, which passes approximately one mile east of Pleasant Hill in a north to south direction. Faults within and near the Pleasant Hill area are shown in Figure 3.5-3.

Seismic Hazards and Areas

Surface Rupture

HAZARD CHARACTERISTICS

Surface rupture represents the breakage of ground along the surface trace of a fault, which is caused by the intersection of the fault surface area ruptured in an earthquake with the earth's surface. Fault displacement occurs when material on one side of a fault moves relative to the material on the other side of the fault. This can have particularly adverse consequences when buildings are located within the rupture zone. It is not feasible, from a structural or economic perspective, to design and build structures that can accommodate rapid displacement involved with surface rupture. Amounts of surface displacement can range from a few inches to tens of feet during a rupture event.

Faults are geologic hazards due to the potential for both surface fault displacement and seismic ground shaking that are distinct but related properties. Surface fault displacement results when the fault plane ruptures and that rupture surface extends to, or intersects, the ground surface. Surface fault rupture can be very destructive to structures constructed across active faults. However, the zone of damage is limited to a relatively narrow area along either side of the fault as opposed to seismic ground shaking damage that can be quite widespread. Faults are categorized as active, potentially active, and inactive. A fault is classified as active if it has moved during the Holocene time, which consists of approximately the last 11,000 years. A fault is classified as potentially active if it has experienced movement within Quaternary time, which is during the last 1.8 million years. Faults that have not moved in the last 1.8 million years are generally considered inactive.

GENERAL PLAN AREA (PLEASANT HILL)

Within the Pleasant Hill (i.e., the General Plan area), there is no active fault line with potential for surface rupture according to the United States Geological Survey. The closest active fault zone outside of the General Plan area is the Concord Fault Zone, which is located approximately one mile from Pleasant Hill's eastern boundary.⁶

⁶ California Geological Survey. 2021.Earthquake Zones of Required Investigation [map]. https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed November 2022)

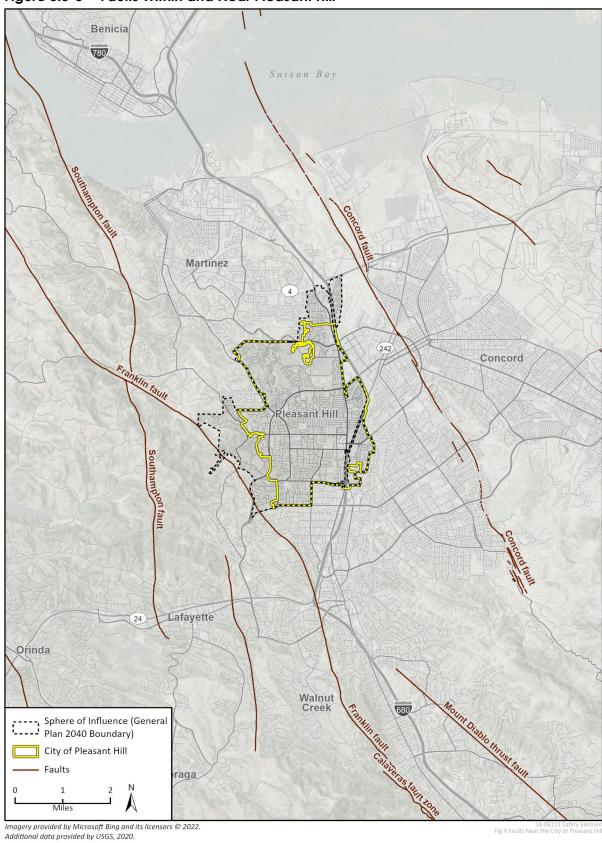


Figure 3.5-3 Faults Within and Near Pleasant Hill

Ground Shaking

HAZARD CHARACTERISTICS

In addition to surface rupture, the major cause of structural damage from earthquakes is ground shaking. The intensity of ground motion expected at a particular site depends upon the magnitude of the earthquake, the distance to the epicenter, and the geology of the area between the epicenter and the property. Greater movement can be expected at sites located on poorly consolidated material, such as alluvium, within close proximity to the ruptured fault, or in response to a seismic event of great magnitude.

PLEASANT HILL (GENERAL PLAN AREA)

Pleasant Hill (i.e., the General Plan area) has been impacted by ground shaking during major earthquakes in the seismically active San Francisco Bay Area region and is likely to experience ground shaking from major earthquakes in the future. Due to the proximity of the Concord Fault, the Association of Bay Area Governments (ABAG) Resiliency Program has identified the ground-shaking potential in Pleasant Hill as "severe." Groundshaking would be most intense resulting from an earthquake originating from any of the other nearby faults that have the potential to create significant groundshaking throughout Pleasant Hill.⁷

Liquefaction

HAZARD CHARACTERISTICS

Liquefaction is a seismic phenomenon in which loose, saturated granular and non-plastic fine-grained soils lose their structure/strength when subjected to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater within the top 50 feet of the ground surface; 2) low-density non-plastic soils; and 3) high-intensity ground motion.

PLEASANT HILL (GENERAL PLAN AREA)

Pleasant Hill (i.e., the General Plan area) has been identified to have a moderate potential for liquefaction. Areas in the southwestern and westernmost areas of Pleasant Hill have low potential for liquefaction. However, the eastern portion of Pleasant Hill is identified as having a medium potential for liquefaction. 9

Figure 3.5-4 depicts the liquefaction potential of the General Plan area.

⁷ Association of Bay Area Governments (ABAG). 2021. MTC/ABAG Hazard Viewer Map [map].

 $https://mtc.maps.arcgis.com/apps/webappviewer/index.html? id=4a6f3f1259df42eab29b35dfcd086fc8\ (accessed\ November\ 2022)$

⁸ Association of Bay Area Governments (ABAG). 2021. MTC/ABAG Hazard Viewer Map [map].

https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed November 2022)

⁹ Contra Costa County. 2018. Contra Costa County Hazard Mitigation Plan: Volume 2 – Planning Partner Annexes.

https://www.contracosta.ca.gov/DocumentCenter/View/48894/Contra-Costa-County-Draft-Local-Hazard-Mitigation-Plan-Volume-2-January-31-2018?bidId= (accessed November 2022).

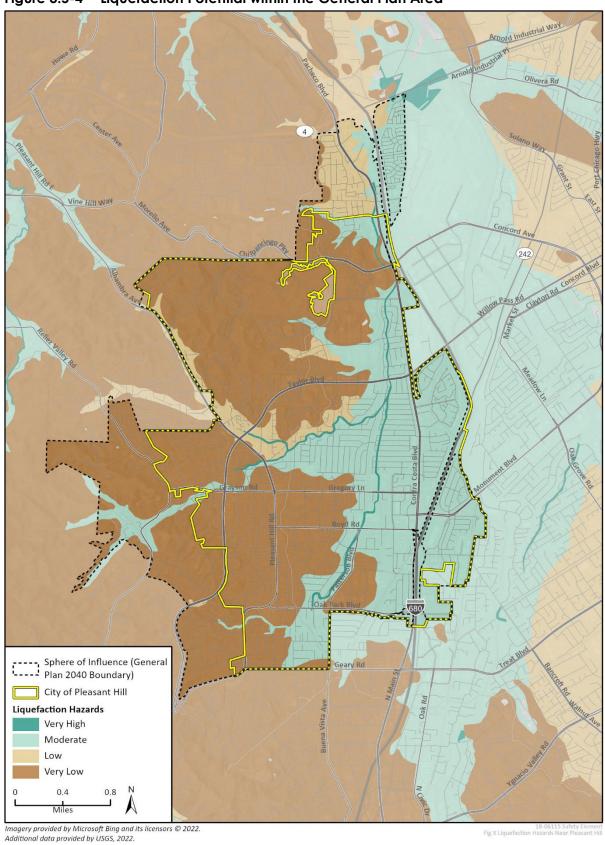


Figure 3.5-4 Liquefaction Potential within the General Plan Area

Landslides and Slope Stability

HAZARD CHARACTERISTICS

Seismic ground shaking can also result in landslides and other slope instability issues. Landslides occur when slopes become unstable and masses of earth material move downslope. Landslides are usually rapid events, often triggered during periods of rainfall or by earthquakes. Mudslides and slumps are a more-shallow type of slope failure. They typically affect the upper surficial soil horizons rather than bedrock features. Usually, mudslides and slumps occur during or soon after periods of rainfall, but they can be triggered by seismic shaking. The areas most susceptible to landslides are shown on maps prepared by the California Division of Mines and Geology. In addition, landslides occur where faults have fractured rock and along the base of slopes or cliffs where supporting material has been removed by stream or wave erosion, or human activities. Heavy rainfall, human actions, or earthquakes can trigger landslides. They may take the form of a slow continuous movement such as a slump or may move very rapidly as a semi-liquid mass such as a debris flow or avalanche.

PLEASANT HILL (GENERAL PLAN AREA)

The western and southwestern portions of Pleasant Hill (i.e., the General Plan area) are located closer to the Briones Hills and are identified within the ABAG Resilience Program and the U.S. Geological Survey (USGS) as having had past landslides and having the potential for landslide hazards. ^{10,11} However, the flatter, eastern portion of Pleasant Hill is identified as having a low potential for landslides. ¹²

Figure 3.5-5 depicts the landslide potential within the General Plan area.

¹⁰ Association of Bay Area Governments (ABAG). 2021. MTC/ABAG Hazard Viewer Map [map].

https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed November 2022) ¹¹ USGS. 2022. US Landslide Inventory.

https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d (accessed November 2022)/

¹² Contra Costa County. 2018. Contra Costa County Hazard Mitigation Plan: Volume 2 – Planning Partner Annexes.

https://www.contracosta.ca.gov/DocumentCenter/View/48894/Contra-Costa-County-Draft-Local-Hazard-Mitigation-Plan-Volume-2-January-31-2018?bidId= (accessed November 2022).

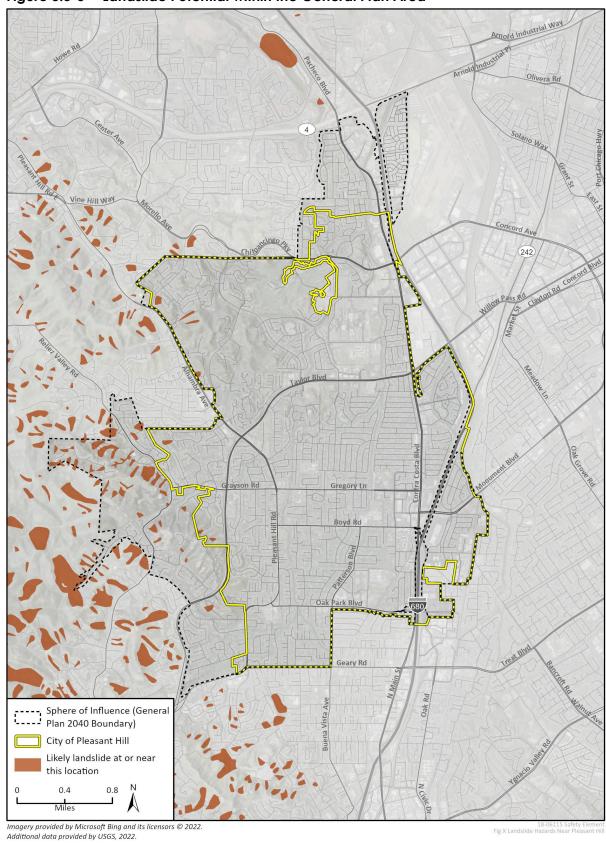


Figure 3.5-5 Landslide Potential within the General Plan Area

Subsidence

HAZARD CHARACTERISTICS

Subsidence or settlement can occur from immediate settlement, consolidation, shrinkage of expansive soil, and liquefaction. Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs quickly and is typically complete after placement of the final load. Consolidation settlement occurs in saturated clay from the volume change caused by squeezing out water from the pore spaces. Consolidation occurs over a period of time and is followed by secondary compression, which is a continued change in void ratio under the continued application of the load. Soils tend to settle at different rates and by varying amounts depending on the load weight or changes in properties over an area, which is referred to as differential settlement. Areas underlain by soft sediments or undocumented fills are most prone to settlement.

PLEASANT HILL (GENERAL PLAN AREA)

Within Pleasant Hill (i.e., General Plan area), areas where expansive soils are located may experience subsidence. When fill or structure loads are placed on these muds for development, flood control, or other purposes, settlement can result.

Slope Disturbance

Disturbance Characteristics

Slope disturbance from long-term geologic cycle of uplift, mass wasting, intense precipitation or wind, and gravity can result in slope failure in the form of mudslides and rock fall. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation or wind, which varies according to climactic shifts. Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil. Soil creep is a long-term, gradual downhill migration of soil under the influence of gravity and is generally on the order of a fraction of an inch per year. These soils can creep away downslope sides of foundations and reduce lateral support.

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan area) does not contain active faults that would cause geologic uplifting. According to the Landslide Susceptibility Zones figure in the Contra Costa County Hazard Mitigation Plan, the western portion of Pleasant Hill is located in an area designated as having a "moderate" to "high" risk for landslides.

Pleasant Hill is not in a State-designated earthquake induced landslide hazard zone, but it is identified within the ABAG Resilience Program as having had past landslides on the steeper slopes throughout the western portion. ¹³

¹³ Association of Bay Area Governments (ABAG). 2021. MTC/ABAG Hazard Viewer Map [map]. https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed November 2022)

Paleontological Resources

Definitions

PALEONTOLOGICAL RESOURCES

Paleontological resources, or fossils, are the remains and traces of prehistoric life. Fossils are typically preserved in layered sedimentary rocks and the distribution of fossils is a result of the sedimentary history of the geologic units within which they occur. Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. Although it is not possible to determine whether a fossil will occur in any specific location, it is possible to evaluate the potential for geologic units to occur within Pleasant Hill.

To determine the uniqueness of a given paleontological resource, it must first be identified or recovered (i.e., salvaged). CEQA does not define "a unique paleontological resource or site." However, the Society of Vertebrate Paleontology (SVP) has defined a "significant paleontological resource" in the context of environmental review as follows:

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 typically older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (SVP 2010).

PALEONTOLOGICAL SENSITIVITY

Absent specific agency guidelines, most professional paleontologists in California adhere to guidelines set forth by the SVP¹⁴ in "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources." These guidelines establish detailed protocols for the assessment of the paleontological resource potential, or "sensitivity" of a project area and outline measures to follow in order to mitigate adverse impacts to known or unknown fossil resources during project development. Using baseline information gathered during a paleontological resource assessment, the paleontological resource potential of the geologic unit(s) or members thereof underlying a project area can be assigned to a high, undetermined, low, or no paleontological sensitivity category, as defined by SVP.¹⁴ This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines.

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, rare, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and geologic processes. New or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, and evolutionary rates. Even unidentifiable material can provide useful data for dating geologic units if radiometric dating is possible. As such, common fossils, especially vertebrates, may be scientifically important, and therefore considered highly significant.

¹⁴ Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.

In general, for geologic units with high sensitivity, full-time monitoring is recommended during any project-related ground disturbance. For geologic units with low sensitivity, protection or salvage efforts are not required. For geologic units with undetermined sensitivity, field surveys by a qualified paleontologist are usually recommended to specifically determine the paleontological potential of the rock units present within the study area. For geologic units with no sensitivity, a paleontological monitor is not required.

Paleontological Resources Sensitivity in Pleasant Hill (General Plan Area)

Rincon assessed the paleontological sensitivity of each of the geologic units underlying the General Plan area according to SVP guidelines.¹⁴ The sensitivity assignments were made based on review of primary scientific literature, geologic maps, and online fossil databases.

The General Plan area is located within the *Walnut Creek* United States Geological Survey 7.5-minute topographic quadrangle. The regional geology was mapped at a scale of 1:24,000 by Dibblee and Minch,¹⁵ who identified eight distinct geologic units underlying the General Plan area (Figure 3.5-1) and listed below.

- Quaternary alluvium (Qa)
- Quaternary older alluvium (Qoa)
- Briones Sandstone (Tbr)
- Monterey Formation (Tm)
- San Ramon Formation (Tsr)
- Kreyenhagen Formation (Tk)
- Meganos Formation (Tmg)
- Martinez Formation (Tmz)

The geographic distribution, age, characteristics, and paleontological sensitivity, of these geologic units is discussed below.

QUATERNARY ALLUVIUM

Quaternary alluvium underlies most of eastern plan area and occurs within valleys in the Briones Hills (Figure 3.5-1). Quaternary alluvium consists of poorly sorted, gravel, sand, and clay that is Holocene in age. ¹⁵ Therefore, Quaternary alluvium is likely too young (i.e., less than 5,000 years old) to preserve paleontological resources. ¹⁴ For this reason, Quaternary alluvium has low paleontological sensitivity.

QUATERNARY OLDER ALLUVIUM

Quaternary older alluvium underlies much of the southwestern plan area (Figure 3.5-1). Quaternary older alluvium consists of tectonically undeformed, gray-brown gravel and sand that is Pleistocene in age. ¹⁵ Pleistocene alluvial sediments have produced significant paleontological resources throughout Contra Costa County, including Pleasant Hill, such as ground sloth (*Megalonyx*, *Paramylodon*), mastodon (*Mammut*), horse (*Equus*), mammoth (*Mammuthus*), and pronghorn

¹⁵ Dibblee, T.W. and J.A. Minch. 2005. Geologic map of the Walnut Creek quadrangle, Contra Costa County, California. [map]. Dibblee Geologic Foundation, Dibblee Foundation Map DF-149, scale 1:24,000.

(*Antilocapra*). ^{16,17,18} Given this fossil-producing history, Quaternary older alluvium has high paleontological sensitivity.

BRIONES SANDSTONE

The Briones Sandstone underlies part of northern plan area (Figure 3.5-1). The Briones Sandstone consists of light gray to tan, medium-grained sandstone that includes geologic units that are also known as the Neroly Sandstone, Cierbo Formation, and Hambre Formation.¹⁵ The Briones Sandstone is late Miocene in age. The Briones Sandstone has produced significant fossil localities throughout the northern Coast Ranges, bearing taxa such as marine mammals (*Desmostylus*), birds, turtles, sharks, and invertebrates.^{17,18,19} Given this fossil-producing history, the Briones Sandstone has high paleontological sensitivity.

MONTEREY FORMATION

The Monterey Formation underlies small parts of the western and northern plan area (Figure 3.5-1). The Monterey Formation consists of light gray to tan, medium-grained sandstone or gray, vaguely bedded, shale and siltstone. The Monterey Formation is a marine, Miocene-aged unit that is fossiliferous throughout California (including Contra Costa County), producing numerous fish (Actinopterygii, Chondrichthyes), seal (Pinnipedia), sea cow (Sirenia), whale (Cetacea), and invertebrate fossils. Therefore, the Monterey Formation has high paleontological sensitivity.

SAN RAMON FORMATION

The San Ramon Formation underlies part of the northwestern plan area (Figure 3.5-1). The San Ramon Formation consists of light gray to tan, fine-grained sandstone that is Oligocene in age. ¹⁵ The San Ramon Formation has yielded several dozen fossil localities in Contra Costa County, bearing a variety of marine invertebrates such as bivalves, nautiloids, gastropods, and echinoids. ^{17,18} Given this extensive fossil-producing history, the San Ramon Formation has high paleontological sensitivity.

KREYENHAGEN FORMATION

The Kreyenhagen Formation underlies part of the northwestern plan area (Figure 3.5-1). The Kreyenhagen Formation consists of gray, micaceous shale or light gray to tan, well-bedded sandstone and is late Eocene in age. ¹⁵ Shark (Elasmobranchii), ray-finned fish (Actinopterygii), plants, and microfossils (foraminifera, diatoms), are known from the Kreyenhagen Formation, including within Contra Costa County. ^{17,18} Given this fossil-producing history, the Kreyenhagen Formation has high paleontological sensitivity.

MEGANOS FORMATION

The Meganos Sandstone underlies part of the western plan area (Figure 3.5-1). The Meganos Formation consists of gray, micaceous clay shale. The Meganos Formation is middle to early Eocene in age and is also known as the Los Juntos Shale. The Meganos Formation has produced

¹⁶ Jefferson, G.T. 2010. A catalogue of late Quaternary vertebrates from California. *Natural History Museum of Los Angeles County Technical Report*. Volume 7, pp. 5-172.

¹⁷ Paleobiology Database. 2022. The Paleobiology Database, http://paleobiodb.org/ (accessed October 2022).

¹⁸ University of California Museum of Paleontology. 2022. UCMP online database specimen search portal, http://ucmpdb.berkeley.edu/ (accessed October 2022).

¹⁹ Stirton, R.A. 1939. Cenozoic mammal remains from the San Francisco Bay region. *University of California Publications in Geological Sciences*. Volume 24. pp. 338-409.

²⁰ Leslie, M.S., C.M. Peredo, and N.D. Pyenson. 2019. *Norrisanima miocaena*, a new generic name and redescription of a stem balaeonopteroid mysticete (Mammalian, Cetacea) from the Mlocene of California. *PeerJ*. Volume 7, pp. e7629.

many bivalve, gastropod, and red algae fossils throughout California, including Contra Costa County. Formation this fossil-producing history, the Meganos Formation has high paleontological sensitivity.

MARTINEZ FORMATION

The Martinez Formation underlies part of the western plan area (Figure 3.5-1). The Martinez Formation consists of shale, siltstone, or tan sandstone. The Martinez Formation is early Eocene to Paleocene in age and is also known as the Vine Hill Sandstone. The Martinez Formation has produced many fossil localities throughout Contra Costa County, producing taxa such as sharks (Chondrichthyes), ray-finned fish (Actinopterygii), bivalves, gastropods, and coral. Given this fossil-producing history, the Martinez Formation has high paleontological sensitivity.

3.5.3 Regulatory Framework

Federal Regulations

National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95-124. In establishing the National Earthquake Hazards Reduction Program, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary National Earthquake Hazards Reduction Program agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- USGS of the Department of Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of National Earthquake Hazards Reduction Program priorities is accomplished primarily through original research, publications, and recommendations to assist and guide state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

U.S. Geological Survey Landslide Hazard Program

The USGS created the Landslide Hazard Program in the mid-1970s; the primary objective of the program is to reduce long-term losses from landslide hazards by improving our understanding of the

causes of ground failure and suggesting mitigation strategies. The federal government takes the lead role in funding and conducting this research, whereas the reduction of losses due to geologic hazards is primarily a State and local responsibility. In Contra Costa County, plans and programs designed for the protection of life and property are coordinated by Contra Costa County Health Services.

Clean Water Act

Congress enacted the Clean Water Act (CWA), formerly the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB). The City of Pleasant Hill is located within the San Francisco Bay RWQCB jurisdiction.

Projects that disturb more than one acre are required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing best management practices (BMPs) the discharger would use to prevent and retain storm water runoff and to prevent soil erosion.

Society of Vertebrate Paleontology Guidelines

The Society of Vertebrate Paleontology, a national scientific organization of professional vertebrate paleontologists, has established standard guidelines that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. ²¹ Most practicing professional paleontologists in the nation adhere to the Society of Vertebrate Paleontology's assessment, mitigation, and monitoring requirements, as specifically spelled out in its standard guidelines.

State Regulations

California Code of Regulations, Title 24, Part 2 - California Building Code

The California Building Code (CBC) is contained in the California Code of Regulations, Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which by law is responsible for coordinating all building standards. The CBC incorporates by reference the federal Uniform Building Code with necessary California amendments. The CBC is the regulatory tool that includes building code standards to address geologic and seismic hazards. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

²¹ Society of Vertebrate Paleontology (SVP). 1995. Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources—Standard Guidelines. Society of Vertebrate Paleontology News Bulletin, v. 163, pages 22–27.

Alguist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971, magnitude 6.6 San Fernando earthquake. The Act provides a mechanism for reducing losses from surface fault rupture on a Statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

The Alquist-Priolo Earthquake Fault Zoning Act regulates development near the surface traces of active faults to mitigate the hazard of surface fault rupture. Essentially, this Act contains two requirements: (1) it prohibits the location of most structures for human occupancy across the trace of active faults; and (2) it establishes Earthquake Fault Zones and requires geologic/seismic studies of most proposed development within 50 feet of the zone. The Earthquake Fault Zones are delineated and defined by the State Geologist and identify areas where potential surface rupture along a fault could occur. The nearest Alquist-Priolo Earthquake Fault Zone is located along the Concord Fault to the east of Pleasant Hill. 22

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (the Act) of 1990 was passed into law following the destructive October 17, 1989, magnitude 6.9 Loma Prieta earthquake. The Act directs the CGS to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards, such as liquefaction, landslides, amplified ground shaking, and inundation by tsunami or seiche. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones. CGS maintains these required maps.

California Public Resources Code Section 5097.5

Section 5097.5 of the Public Resources Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Here "public lands" means those owned by, or under the jurisdiction of, the State or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with Public Resources Code Section 5097.5 for their own activities,

²² California Department of Conservation (DOC). 2022. Alquist-Priolo Fault Hazard Zones [map]. https://gis.data.ca.gov/maps/ee92a5f9f4ee4ec5aa731d3245ed9f53/explore?location=37.609765%2C-122.389578%2C12.92 (accessed November 2022)

²³ California Geological Survey (CGS). 2019. The 1989 Loma Prieta Earthquake. https://www.conservation.ca.gov/cgs/earthquakes/loma-prieta (accessed July 2022).

including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

Regional and Local Regulations

Contra Costa County Hazard Mitigation Plan

The Contra Costa County Hazard Mitigation Plan, adopted January 2018, assesses the County's vulnerabilities to various hazards and presents mitigation strategy, including goals, objectives, and actions that the County will strive to implement over the next five years. These hazards include earthquakes and landslides. The hazard mitigation plan seeks to identify opportunities for reasonable mitigation actions and sets out a five-year implementation plan.

Pleasant Hill Municipal Code

The City adopted the California Building Code (CBC) and included it in Pleasant Hill Municipal Code Chapter 14.05. Section 14.05.010 incorporates Title 24 of the California Code of Regulations by reference, which applies to new construction and alterations within City limits. New development is required to adhere to building code requirements and industry standard seismic safety building practices.

Pleasant Hill Municipal Code Chapter 15.10, Grading, outlines the regulations applicable to grading activities within Pleasant Hill, including details for every stage of grading from when a permit is required to excavation and inspection. In addition, this chapter identifies erosion control measures to be implemented during grading activities.

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to geology and soils, but they would be replaced by the proposed 2040 General Plan.

3.5.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Geology/Soils and Mineral Resources.

Would the 2040 General Plan:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 1. 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?
 - 2. Strong seismic ground shaking?
 - 3. Seismic-related ground failure, including liquefaction?
 - 4. Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?

- c) 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?
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirectly risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- g) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the State?
- h) 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?

Approach to Analysis

Geology/Soils

Evaluations of potential geologic and soil impacts of the proposed plan were based on review of available documentation, including the existing (2003) Pleasant Hill General Plan; the Contra Costa County Local Hazard Mitigation Plan; USGS "Shake Map" webpage; the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey; the Association of Bay Area Governments (ABAG) Hazard Viewer Map Database, the California Geological Survey website, and USGS data and publications.

Paleontological Resources

Evaluations of potential paleontological impacts of the proposed plan were based on review of available documentation, including primary literature and online fossil databases available from the Paleobiology Database, Society of Vertebrate Paleontology and the University of California Museum of Paleontology.

Mineral Resources

Evaluations of potential mineral resources impacts of the proposed plan were based on review of available documentation, including the California Department of Conservation Mineral Land Classification.

EIR Scoping Comments Consideration

No EIR scoping comments were received in response to the EIR NOP related to geology, soils, or mineral resources.

Specific Thresholds of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of geology, soils, and mineral resources impacts resulting from implementation of the proposed plan.

Place structures on or within the State designated zone of a known earthquake fault.

- Place structures where seismic ground shaking of a Strong level or greater according to the Mercalli Scale could occur.
- Place structures on soils prone to any level of liquefaction.
- Place structures on slopes greater than 15 percent or soils susceptible to failure as defined by the USGS.
- Place structures in areas without impervious surfaces or vegetation, or on slopes greater than
 15 percent.
- Place structures on a geologic unit or soil that is unstable or that could become unstable.
- Place structures on expansive soil that has an expansion index greater than 20 as defined in Table 18-1-B of the Uniform Building Code (1994).
- Place septic tanks or alternative wastewater disposal systems on soils incapable of supporting the use.
- Physically damage or destroy paleontological resources.

Impact Evaluation

Earthquake Fault Rupture Risk

Significance Criterion a1: Would the proposed plan directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Impact GEO-1 THE 2040 GENERAL PLAN IS NOT LOCATED WITHIN AN ALQUIST PRIOLO EARTHQUAKE FAULT ZONE, AND, THEREFORE, THE PROPOSED PLAN WOULD NOT BE SUBJECT TO EFFECTS INVOLVING RUPTURE OF A KNOWN EARTHQUAKE FAULT. THERE WOULD BE NO IMPACT.

Construction

Impacts related to risks associated with hazards involving fault rupture are limited to operational impacts. No respective construction impacts would occur.

Operation

Pleasant Hill (i.e., the General Plan area) does not contain Alquist Priolo Earthquake Fault Zones. Therefore, persons and property associated with development facilitated by the 2040 General Plan would not be directly or indirectly subject to effects involving rupture of a known earthquake fault, and no operational impact would occur.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

Seismic-related or Unstable Geologic Unit Risk

Significance Criterion a2, a3, & a4: Would the proposed plan directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or

death involving:

1. strong seismic ground shaking?

2. seismic-related ground failure, including liquefaction?

3. landslides?

Significance Criterion b: Would the proposed plan 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?

Impact GEO-2 DEVELOPMENT FACILITATED BY THE PROPOSED PLAN COULD RESULT IN EXPOSURE OF PEOPLE OR STRUCTURES TO A RISK OF LOSS, INJURY, OR DEATH FROM SEISMIC EVENTS. DEVELOPMENT FACILITATED BY THE PROPOSED PLAN COULD BE LOCATED ON A GEOLOGIC UNIT OR SOIL THAT IS UNSTABLE OR COULD BECOME UNSTABLE RESULTING IN ON- OR OFF-SITE LANDSLIDE, LATERAL SPREADING, SUBSIDENCE, LIQUEFACTION, OR COLLAPSE. HOWEVER, WITH COMPLIANCE WITH APPLICABLE LAWS, REGULATIONS, AND APPLICABLE GENERAL PLAN GOALS AND POLICIES, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to risks associated with seismic-related hazards and location on an unstable geologic unit or soil are limited to operational impacts. No respective construction impacts would occur.

Operation

Development facilitated by the 2040 General Plan would result in additional residential, commercial, and retail development that would be potentially exposed to the effects of strong seismic ground shaking (as identified as Strong [VII Intensity or above] on the Mercalli Scale), seismic-related ground failure (liquefaction, lateral spreading, subsidence), and landslides resulting from local and regional earthquakes. Structures built in landslide zones would be exposed to an existing risk of landslide or, if improperly constructed, could exacerbate existing landslide conditions, especially construction on sites in the western portion of Pleasant Hill that is vulnerable to landslide hazard. New structures within the General Plan area could also experience substantial damage during seismic ground shaking events that are likely to occur in the future within the seismically active San Francisco Bay Area. The General Plan area is not located in a State-designated earthquake induced landslide hazard zone, but there have been landslides throughout the western portion of Pleasant Hill. Additionally, the eastern portions of Pleasant Hill could experience liquefaction, lateral spreading, or subsidence due to a seismic event.

Development within Pleasant Hill would be required to be built to current seismic standards that could better withstand the adverse effects of strong ground shaking. Potential structural damage and the exposure of people to the risk of injury or death from structural failure would be minimized by compliance with CBC engineering design and construction measures. Foundations and other structural support features would be required to be designed to resist or absorb damaging forces from strong ground shaking and liquefaction. Allowable increases in height as a result of the 2040

General Plan could require foundations and other structural support features to be more robust to support the additional height; however, compliance with CBC regulations would ensure that the buildings would meet seismic safety standards.

In addition to compliance with mandatory CBC requirements that address safe building development, including requirements to seismically upgrade existing structures, related to these hazards, the following 2040 General Plan goals and policies would further minimize potential adverse effects related to strong ground shaking, seismic-related ground failure, and landslides:

Goal HS-2 Reduce the potential harm to people and property from geologic and seismic hazards.

Policy HS-2.1	Earthquake Hazard. Require new development to be sited away from highrisk earthquake hazard or liquefaction-susceptibility zones, or if located in a high-risk zone, to incorporate building technologies to reduce risk to an acceptable level.
Policy HS-2.2	Geotechnical Study Requirement. Require geotechnical studies for new development in areas with moderate to high liquefaction potential that include analysis of seismic settlement potential and specify appropriate mitigation.
HS-2.3	Seismic Retrofit Incentives. Work with regional, State, and Federal agencies and organizations to incentivize seismic retrofits of structures.
HS-2.4	Slope Failure. Work with regional, State, and Federal agencies and organizations to incentivize seismic retrofits of structures.
HS-2.8	Resilient Infrastructure. Require the location, design, and construction of new public utilities, communication infrastructure, and transportation facilities to minimize risk and maximize functionality during and after an earthquake.
HS-2.9	Slope Stability Assessment. Continue to require slope stability assessments by appropriately registered professionals upon the initiation of new development proposals in areas of known slope instability and/or on slopes steeper than 15 percent.

Implementation of these 2040 General Plan goals and policies, in addition to compliance with applicable laws and regulations such as CBC requirements, would minimize the potential for loss, injury, or death related to strong ground shaking, seismic-related ground failure, and landslides caused by a seismic event within the General Plan area. Thus, overall, compliance with all aforementioned policies and requirements for both proposed and existing structures would minimize the potential for loss, injury, or death related to strong ground shaking, seismic-related ground failure, and landslides caused by a seismic event. Therefore, 2040 General Plan operational impacts related to strong seismic ground shaking, seismic-related ground failure risk, and landslide hazard would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Soil Erosion or Topsoil Loss

Significance Criterion c: Would the proposed plan result in substantial soil erosion or the loss of topsoil?

Impact GEO-3 Construction facilitated by the 2040 General Plan would include ground disturbance such as excavation and grading that would result in loose or exposed soil. Disturbed soil could be eroded by wind or rain during a storm event, which could result in the loss of topsoil. Adherence to existing regulatory requirements would ensure that this impact would be less than significant.

Construction

Development facilitated by the 2040 General Plan would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Loose and disturbed soils are more prone to erosion and loss of topsoil by wind and water.

Construction activities that disturb one or more acres of land surface are subject to NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require preparation of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. As described in Section 3.8, Hydrology and Water Quality, development within Pleasant Hill would be required to comply with NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, otherwise known as the Construction General Permit (Order 2009-0009, as amended by Orders 2010-0014-DWQ and 2012-006-DWQ), which requires measures to reduce and eliminate stormwater pollutants, installation of appropriate BMPs to control stormwater runoff from construction sites, and that grading and drainage permits be obtained prior to construction. Grading and drainage plans accompanying the permit application must include BMPs for erosion prevention and sediment control, fencing at waterways and in sensitive areas, and limitation of disturbed areas through temporary features. The permit applications must also demonstrate compliance with NPDES Municipal Separate Storm Sewer System Permits (MS4) provisions. Enforcement of these permit requirements would reduce soil erosion impacts.

Additionally, Pleasant Hill Municipal Code requirements for erosion prevention and sediment control would apply to construction facilitated by the proposed plan. These include erosion prevention and sediment control in accordance with Chapter 15.10 of the Pleasant Hill Municipal Code, conformance of plans to erosion prevention and sediment control BMPs, grading restrictions during the winter rain period, potential need for water sprinkling equipment on site during grading, and regulations of cut and fill slopes. Adherence to the requirements of the Pleasant Hill Municipal Code BMPs would reduce the potential for development facilitated by the project to cause erosion or the loss of topsoil by ensuring proper management of loose and disturbed soil. Therefore, 2040

General Plan construction impacts related to soil erosion and loss of topsoil would be less than significant.

Operation

Impacts related to soil erosion or loss of topsoil are limited to construction impacts. No respective operational impacts would occur.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Expansive Soil Risk

Significance Criterion d: Would the proposed plan be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact GEO-4 FUTURE SEISMIC EVENTS COULD RESULT IN LIQUEFACTION AND LATERAL SPREADING OF SOILS WITHIN THE CITY. DEVELOPMENT IN THE GENERAL PLAN AREA COULD BE SUBJECT TO LIQUEFACTION HAZARDS. COMPLIANCE WITH THE CBC WOULD REDUCE LIQUEFACTION HAZARDS. PROPOSED HEALTH, SAFETY, AND HAZMAT GOALS AND POLICIES APPLY TO DEVELOPMENT FACILITATED BY THE PROPOSED PLAN IN HAZARD ZONES FOR LIQUEFACTION OR LATERAL SPREADING OF SOILS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to risks associated with location on expansive soil are limited to operational impacts. Construction of development facilitated by the 2040 General Plan would comply with the CBC and applicable federal, State, and local regulations that would ensure construction activities (e.g., excavation of subterranean space) would not cause direct or indirect impacts to nearby properties in areas where expansive soils could potentially exist. No respective construction impacts would occur.

Operation

Development facilitated by the 2040 General Plan on expansive soils, as defined by Table 1-B of the Uniform Building Code (1994), within the eastern portion of Pleasant Hill could be subject to damage or could become unstable when the underlying soil shrinks or swells. The adverse effects of expansive soils can be avoided through proper subsoil preparation, drainage, and foundation design. In order to design an adequate foundation, it must be determined if the site contains expansive soils through appropriate soil sampling and laboratory soils testing. Expansive soils are identified through expansion tests of samples of soil or rock, or by means of the interpretation of Atterberg limit tests, a standard soils testing procedure. The CBC includes requirements to address soil-related hazards, including testing to identify expansive soils and design specifications where structures are to be constructed on expansive soils. Typical measures to treat expansive soil conditions involve removal, proper fill selection, and compaction. In cases where soil remediation is

not feasible, the CBC requires structural reinforcement of foundations to resist the forces of expansive soils. Compliance with the requirements of the CBC, as well as relevant General Plan policies (as discussed in detail under Impact GEO-2), would reduce risks related to expansive soils. Therefore, 2040 General Plan operational impacts related to expansive soils would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Soils Incapable of Supporting Alternative Wastewater Disposal Systems

Significance Criterion e: Would the proposed plan have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact GEO-5 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD OCCUR ON URBANIZED SITES THAT ARE SERVED BY EXISTING SANITATION INFRASTRUCTURE. NEW DEVELOPMENT WOULD NOT INCLUDE SEPTIC SYSTEMS. THERE WOULD BE NO IMPACT.

Construction

Impacts related to the soil capability of supporting the use of alternative wastewater disposal systems are limited to operation. No construction impacts would occur.

Operation

Development facilitated by the 2040 General Plan would occur in urbanized areas where existing wastewater infrastructure exists. The proposed plan would not include or require the use of septic tanks or alternative wastewater disposal systems. Therefore, no operational impacts would occur.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

Effects on Unique Paleontological Resources or Geologic Features

Significance Criterion f: Would the proposed plan directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-6 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN HAS THE POTENTIAL TO IMPACT PALEONTOLOGICAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Consistent with SVP guidelines, ¹⁴ the paleontological sensitivity of the eight geologic units underlying the plan area were assessed based on review of published geologic maps, a literature review, and online fossil locality databases. All eight geologic units are found within Pleasant Hill City Limits (Figure 3.5-1). The age and paleontological sensitivity of these geologic units are summarized in Table 3.5-2 and respective locations are shown in Figure 3.5-6.

Table 3.5-2 Geologic Units in General Plan Area and Paleontological Sensitivity

Geologic Unit ¹⁵	Age	Paleontological Sensitivity
Quaternary alluvium (Qa)	Holocene	Low
Quaternary older alluvium (Qoa)	Pleistocene	High
Briones Sandstone (Tbr)	Miocene	High
Monterey Formation (Tm)	Miocene	High
San Ramon Formation (Tsr)	Oligocene	High
Kreyenhagen Formation (Tk)	Eocene	High
Meganos Formation (Tms)	Eocene	High
Martinez Formation (Tmz)	Eocene to Paleocene	High

Source: Dibblee, T.W. and J.A. Minch. 2005. Geologic map of the Walnut Creek quadrangle, Contra Costa County, California. [map]. Dibblee Geologic Foundation, Dibblee Foundation Map DF-149, scale 1:24,000.

Vine Hill Way Concord Av Chilpancingo TE Time Pleasant Hill @ Oak Park Blvd Ting Geary Rd Sphere of Influence **Geologic Units** Qa-Quaternary alluvium (Holocene) City of Pleasant Hill Qoa-Quaternary older alluvium (Pleistocene) **Paleontological Sensitivity** Tbr—Briones Sandstone (Miocene) /// High Tm—Monterey Formation (Miocene) Low Tsr—San Ramon Formation (Oligocene) Tk-Kreyenhagen Formation (Eocene) Tmg-Meganos Formation (Eocene) 2,000 4,000 Tmz—Martinez Formation (Eocene to Paleocene) Feet Imagery provided by Esri and its licensors © 2023. Additional data provided by Dibblee and Minch 2005.

Figure 3.5-6 Geologic Units in General Plan Area and Paleontological Sensitivity

Construction

Ground-disturbing construction activities that impact previously geologic units with high paleontological sensitivity may result in significant impacts to paleontological resources (Table 3.5-2). However, potentially significant impacts to paleontological resources can only be determined once a specific project has been proposed because the effects are highly dependent on both the individual project site conditions (e.g., presence of previously disturbed sediments or artificial fill) and the characteristics of the proposed ground disturbance (e.g., depth, total volume, type of construction). Ground-disturbing activities associated with construction facilitated by the 2040 General Plan particularly in areas that have not previously been developed with urban uses, have the potential to damage or destroy paleontological resources that may be present on or below the ground surface in areas of high paleontological sensitivity. Consequently, damage to or destruction of fossils could occur due to development under the proposed 2040 General Plan. However, implementation of Mitigation Measure GEO-1 would reduce 2040 General Plan construction impacts related to the destruction of paleontological resources or unique geological features to less than significant with mitigation.

Operation

Impacts with the potential to cause substantial adverse change in the significance of a unique paleontological resource or unique geologic feature are limited to construction. No respective operational paleontological resources impacts would occur.

Mitigation Measures

MITIGATION MEASURE GEO-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO PROTECT PALEONTOLOGICAL RESOURCES

The City of Pleasant Hill shall add a policy (or policies) providing for the protection of paleontological resources to the 2040 General Plan prior to its adoption. The policy (policies) shall include the following:

- A Qualified Professional Paleontologist (as defined by SVP¹⁴) must be retained to conduct a paleontological resources analysis prior to the beginning of projects involving ground disturbance in geologic units with high paleontological sensitivity to determine whether there is a potential for significant impacts to paleontological resources.
- If potential impacts to paleontological resources are found to be significant, then a Qualified Professional Paleontologist shall be retained to develop and implement a Paleontological Resources Mitigation Program to ensure that impacts to paleontological resources are less than significant.

Level of Significance

Less than significant with mitigation

Availability of a Mineral Resource or Recovery Site

Significance Criterion g: Would the proposed plan 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?

Significance Criterion h: Would the proposed plan result in the loss of availability of a locally

important mineral resource recovery site delineated on a local general

plan, specific plan, or other land use plan?

Impact GEO-7 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT HAVE THE POTENTIAL TO IMPACT MINERAL RESOURCES. THERE WOULD BE NO IMPACT.

Construction and Operation

There are no significant mineral deposits or active mining operations within or in the vicinity of the General Plan area. In addition, implementation of the proposed plan would not affect a locally important mineral resource recovery site delineated by an applicable land use plan. Therefore, the proposed plan would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site during construction or operational activities. No construction or operational mineral resources impacts would occur.

Mitigation Measures

No mitigation is required.

Level of Significance

No impact

3.5.5 Cumulative Impacts

The geographic scope of the cumulative geology/soils and mineral resources analysis is the General Plan area and the surrounding vicinity. Adverse effects associated with many geologies and soils tend to be localized; therefore, an area generally within a 0.25-mile radius would be the area most affected by activities in combination with the proposed plan. In addition, adverse effects associated with paleontological resource impacts tend to be localized, because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in surrounding cities in addition to the proposed plan.

Seismic-related Hazards

Cumulative projects, including the proposed plan, have the potential to experience strong to violent groundshaking from earthquakes. Cumulative projects listed in Table 3-1 would be exposed to the similar ground shaking hazards and would be subject to the same requirements. All cumulative projects would adhere to the provisions of the California Building Code, and policies of the 2040 General Plan and Pleasant Hill Municipal Code and surrounding city general plans and municipal codes, reducing potential hazards associated with seismic ground shaking and ground failure. Therefore, the cumulative impact related to seismic-related hazards would be less than significant.

Soil-related Hazards

Soil conditions associated with the proposed plan, such as differential settlement, expansive soils, and soil creep, are specific to the plan area and generally do not contribute to a cumulative effect. Some or all other cumulative projects may have similar conditions, but they also would not contribute to a general geologic or soil cumulative effect. The proposed plan would be subject to all City of Pleasant Hill 2040 General Plan policies, municipal code policies, and the CBC reducing soil-related hazard impacts. Other current and future development projects in the region would similarly be required to adhere to standards and practices that include stringent geologic and soil-related hazard mitigations. Therefore, the cumulative impact related to soil-related hazards would be less than significant.

Unique Geological Feature and Paleontological Resources

Construction activities associated with development of cumulative plans and projects in or within the vicinity of the General Plan area may have the potential to encounter undiscovered geologic resources and paleontological resources. The potential impacts to paleontological resources of each of those projects would be on an individual basis, depending on their location and construction activities, rather than cumulative. Therefore, cumulative impacts related to paleontological resources and unique geologic features would be less than significant.

Mineral Resources

Since there is no plan-level impact related to mineral resources, there would also be no cumulative impact related to mineral resources.

Overall Level of Cumulative Significance

Less than significant

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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3.6 Greenhouse Gas Emissions and Energy

3.6.1 Introduction

This section describes existing greenhouse gas (GHG) emissions and sources and energy use Statewide, regionally, and within the City of Pleasant Hill as well as the relevant regulatory framework. This section also analyzes possible impacts related to greenhouse gas (GHG) emissions and energy use from implementation of the 2040 General Plan. Information included in this section is based on the vehicle miles traveled (VMT) data drawn from the Pleasant Hill 2040 General Plan Transportation Impact Analysis (TIA), which is included as Appendix D to this EIR.

3.6.2 Environmental Setting

Greenhouse Gas Emissions

Greenhouse Effect, Global Warming, and Climate Change

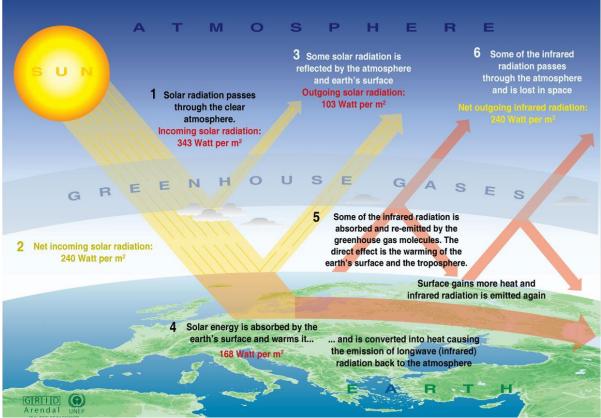
Most of the energy that affects the Earth's climate comes from the sun. Some solar radiation is absorbed by the Earth's surface, and a smaller portion of this radiation is reflected by the atmosphere back toward space. As the Earth absorbs high frequency solar radiation, its surface gains heat and then re-radiates lower frequency infrared radiation back into the atmosphere.

Most solar radiation passes through gases in the atmosphere classified as GHGs; however, infrared radiation is selectively absorbed by GHGs. GHGs in the atmosphere play a critical role in maintaining the balance between the Earth's absorbed and radiated energy, the Earth's radiation budget, by trapping some of the infrared radiation emitted from the Earth's surface that otherwise would have escaped to space (see Figure 3.6-1). Radiative forcing is the difference between the incoming energy and outgoing energy. Specifically, GHGs affect the radiative forcing of the atmosphere, which in turn affects the Earth's average surface temperature. This phenomenon, the greenhouse effect, keeps the Earth's atmosphere near the surface warmer than it would be otherwise and allows successful habitation by humans and other forms of life.

Combustion of fossil fuels and deforestation release carbon into the atmosphere that historically has been stored underground in sediments or in surface vegetation, thereby exchanging carbon from the geosphere and biosphere to the atmosphere in the carbon cycle. With the accelerated increase in fossil fuel combustion and deforestation since the Industrial Revolution of the 19th century, concentrations of GHGs in the atmosphere have increased exponentially. Such emissions of GHGs in excess of natural ambient concentrations contribute to the enhancement of the natural greenhouse effect. This enhanced greenhouse effect has contributed to global warming, an increased rate of warming of the Earth's average surface temperature. Specifically, increases in GHGs lead to increased absorption of infrared radiation by the Earth's atmosphere and warm the lower atmosphere further, thereby increasing temperatures and evaporation rates near the surface.

Variations in natural phenomena such as volcanoes and solar activity produced most of the global temperature increase that occurred during preindustrial times. More recently, however, increasing atmospheric GHG concentrations resulting from human activity have been responsible for most of the observed global temperature increase.

Figure 3.6-1 The Greenhouse Gas Effect



Source: United Nations Environmental Program/GRID-Arendal. 2005. Greenhouse Effect. https://www.grida.no/resources/6467.

Warming affects global atmospheric circulation and temperatures; oceanic circulation and temperatures; wind and weather patterns; average sea level; ocean acidification; chemical reaction rates; precipitation rates, timing, and form; snowmelt timing and runoff flow; water supply; wildfire risks; and other phenomena, in ways collectively referred to as climate change. Climate change is the alteration in the average weather of the Earth that is measured by modifications in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

TEMPERATURE PREDICTIONS

The United Nations Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean temperature change from 1990 to 2100, given six scenarios, could range from 1.1 degrees Celsius (°C) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios. The report also concluded that "[w]arming of the climate system is

unequivocal," and that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations." Warming of the climate system is now considered to be unequivocal, with the global surface temperature increasing about 1.33 degrees Fahrenheit (°F) over the last 100 years. The IPCC predicts increases in global average temperature of between 2°F and 11°F over the next 100 years.

GREENHOUSE GASES AND GLOBAL EMISSION SOURCES

Gases that trap heat in the atmosphere are referred to as GHGs. Prominent GHGs that naturally occur in the Earth's atmosphere are water vapor, carbon dioxide (CO_2), methane (CH_4), oxides of nitrogen (NO_X), and ozone. Anthropogenic (human-caused) GHG emissions include releases of these GHGs plus release of human-made gases with high global warming potential (GWP) (ozone-depleting substances such as chlorofluorocarbons [CFCs]) and aerosols, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The GHGs listed by the IPCC (CO_2 , CH_4 , nitrous oxide (N_2O), HFCs, PFCs, and SF_6) are discussed below, in order of abundance in the atmosphere. Water vapor, despite being the most abundant GHG, is not discussed below, because natural concentrations and fluctuations far outweigh anthropogenic influences, making it impossible to predict. Ozone is not included, because it does not directly affect radiative forcing. Ozone-depleting substances (CFCs, halons, carbon tetrachloride, methyl chloroform, and hydrochlorofluorocarbons) are not included, because they have been replaced by HFCs and PFCs.

The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere and is essentially a measurement of the radiative forcing of a GHG compared with the reference gas, CO₂. Individual GHG compounds have varying potential for contributing to global warming. For example, CH_4 is 25 times as potent as CO_2 , while SF_6 is 22,200 times more potent than CO_2 on a molecule-per-molecule basis. To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method for comparing GHG emissions is the GWP methodology defined in the IPCC reference documents.² The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalents (CO₂e), which compares the gas in question to that of the same mass of CO2 (by definition, CO₂ has a GWP of 1). The global warming potential of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming. Thus, to describe how much global warming a given type and amount of GHG may cause, the CO₂e is used. A CO₂e is the mass emissions of an individual GHG multiplied by its global warming potential. As such, a high GWP represents high absorption of infrared radiation and a long atmospheric lifetime compared to CO₂. One must also select a time horizon to convert GHG emissions to equivalent CO₂ emissions to account for chemical reactivity and lifetime differences among various GHG species. The standard time horizon for climate change analysis is 100 years. Generally, GHG emissions are quantified in terms of metric tons (MT) CO₂e emitted per year.

The atmospheric residence time of a gas is equal to the total atmospheric abundance of the gas divided by its rate of removal. The atmospheric residence time of a gas is, in effect, a half-life measurement of the length of time a gas is expected to persist in the atmosphere when accounting for removal mechanisms such as chemical transformation and deposition. Table 3.6-1 lists the GWP of each GHG and its lifetime. Units commonly used to describe the concentration of GHGs in the atmosphere are parts per million (ppm), parts per billion (ppb), and parts per trillion (ppt), referring to the number of molecules of the GHG in a sampling of 1 million, 1 billion, or 1 trillion molecules of

¹ IPCC. 2007. AR4 Climate Change 2007: The Physical Science Basis. https://www.ipcc.ch/report/ar4/wg1/ (accessed October 2022)

² IPCC. 2014. Frequently Asked Questions. https://www.ipcc-nggip.iges.or.jp/faq/FAQ.pdf (accessed October 2022)

air. Collectively, HFCs, PFCs, and SF_6 are referred to as high-GWP gases. CO_2 is by far the largest component of worldwide CO_2 e emissions, followed by CH_4 , N_2O , and high-GWP gases, in order of decreasing contribution to CO_2 e.

The primary human processes that release GHGs include the burning of fossil fuels for transportation, heating, and electricity generation; agricultural practices that release CH₄, such as livestock grazing and crop residue decomposition; and industrial processes that release smaller amounts of high-GWP gases. Deforestation and land cover conversion have also been identified as contributing to global warming by reducing the Earth's capacity to remove CO₂ from the air and altering the Earth's albedo or surface reflectance, thus allowing more solar radiation to be absorbed. Specifically, CO₂ emissions associated with fossil fuel combustion are the primary contributors to human-induced climate change. CO₂, CH₄, and N₂O emissions associated with human activities are the next largest contributors to climate change. GHGs of California concern are defined by California Assembly Bill (AB) 32 (see the Regulatory Environment subsection below for a description) and include CO₂, CH₄, NOX, HFCs, PFCs, and SF₆. A seventh GHG, nitrogen trifluoride (NF₃), was also added under the California Health and Safety Code Section 38505(g)(7) as a GHG of concern. These GHGs are described in terms of their physical description and properties, global warming potential, atmospheric residence lifetime, sources, and atmospheric concentration in 2005 in Table 3.6-1.

Global Climate Change

EXTENT

Climate change is a global problem, because GHGs are global pollutants, unlike criteria air pollutants and hazardous air pollutants (i.e., toxic air contaminants) that are pollutants of regional and local concern. Pollutants with localized air quality effects have relatively short atmospheric lifetimes, approximately one day; by contrast, GHGs have long atmospheric lifetimes, several years to several thousand years. GHGs persist in the atmosphere for enough time to be dispersed around the globe.

Although the exact lifetime of particular GHG molecules depends on multiple variables and cannot be pinpointed, more CO_2 is currently emitted into the atmosphere than is sequestered. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through photosynthesis and dissolution, respectively. These are two of the most common processes of CO_2 sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered through ocean uptake, Northern Hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46 percent of human-caused CO_2 emissions is stored in the atmosphere (Seinfeld 2006).

Similarly, effects of GHGs are borne globally, as opposed to the localized air quality effects of criteria air pollutants and hazardous air pollutants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known and cannot be quantified, and no single plan or project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global or local climates or microclimate. However, emissions of GHGs have the potential to adversely affect the environment, because such emissions contribute, on a cumulative basis, to global climate change.

Table 3.6-1 Description of Greenhouse Gases of California Concern

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Carbon dioxide (CO ₂)	Odorless, colorless, natural gas.	1	50–200	Burning coal, oil, natural gas, and wood; decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; oceanic evaporation; volcanic outgassing; cement production; land use changes.
Methane (CH ₄)	Flammable gas and is the main component of natural gas.	25	12	Geological deposits (natural gas fields) extraction; landfills; fermentation of manure; and decay of organic matter.
Nitrous oxide (N₂O)	N ₂ O (laughing gas) is a colorless GHG.	298	114	Microbial processes in soil and water; fuel combustion; industrial processes.
Chloro-fluoro-carbons (CFCs)	Nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (level of air at the Earth's surface); formed synthetically by replacing all hydrogen atoms in CH ₄ or ethane with chlorine and/or fluorine atoms.	3,800–8,100	45–640	Refrigerants aerosol propellants; cleaning solvents.
Hydro-fluoro-carbons (HFCs)	Synthetic human-made chemicals used as a substitute for CFCs and contain carbon, chlorine, and at least one hydrogen atom.	140-11,700	1–50,000	Automobile air conditioners; refrigerants.
Per- fluoro-carbons (PFCs)	Stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.	6,500-9,200	10,000–50,000	Primary aluminum production; semiconductor manufacturing.
Sulfur hexafluoride (SF ₆)	Human-made, inorganic, odorless, colorless, and nontoxic, nonflammable gas.	22,800	3,200	Electrical power transmission equipment insulation; magnesium industry, semiconductor manufacturing; a tracer gas.
Nitrogen trifluoride (NF ₃)	Inorganic, is used as a replacement for PFCs, and is a powerful oxidizing agent.	17,200	740	Electronics manufacture for semiconductors and liquid crystal displays.

IPCC 2007. AR4 Climate Change 2007: Synthesis Report. https://www.ipcc.ch/report/ar4/syr/.

TRENDS AND EFFECTS

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than was observed during the 20th century. Long-term trends found that each of the past four decades was warmer than all the previous decades in the instrumental record. The observed global mean surface temperature for the decade from 2006 to 2015 was 0.87°C higher than the global mean surface temperature over the period from 1850 to 1900. Several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations agree that Land-Surface Air Temperature and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades.^{3,4}

According to California's Fourth Climate Change Assessment, Statewide temperatures from 1986 to 2016 were approximately 1°F to 2°F higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include loss in water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years. While there is growing scientific consensus about the possible effects of climate change at a global and Statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy.⁵

In California, climate change may result in consequences such as the following:

- Reduction in the quality and supply of water from the Sierra snowpack. If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- Increased risk of large wildfires. If rain increases as temperatures rise, wildfires in the forests, grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase

³ IPCC. 2014. Summary for Policymakers. In: AR5 Climate Change 2014, Mitigation of Climate Change. https://www.ipcc.ch/report/ar5/wg3/ (accessed October 2022)

⁴ IPCC. 2018. Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report. https://www.ipcc.ch/sr15/ (accessed October 2022)

⁵ California, State of. 2018. California Fourth Climate Change Assessment Statewide Summary Report. http://www.climateassessment.ca.gov/state/ (accessed October 2022)

- expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- Rise in sea levels resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- Increase in temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- Decrease in the health and productivity of California's forests. Climate change can cause an
 increase in wildfires, an enhanced nuisance insect population, and establishment of non-native
 species.
- Damage to marine ecosystems and natural environment. Climate change can cause damage to marine ecosystems, including acidification of the oceans due to increased CO₂ levels (including coral bleaching).

Existing GHG Emissions

GLOBAL

Worldwide anthropogenic emissions of GHG were approximately 46,000 MMT, or gigatonne of CO_2e in 2010. CO_2 emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO_2 was the most abundant accounting for 76 percent of total 2010 emissions. CH_4 emissions accounted for 16 percent of the 2010 total, while N_2O and fluorinated gases account for six and two percent, respectively.⁶

UNITED STATES

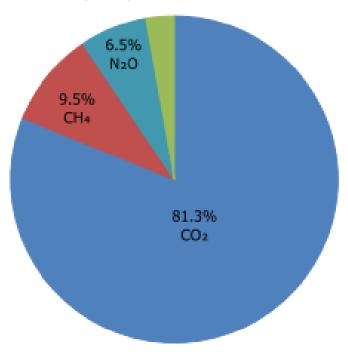
Total U.S. GHG emissions were 6,676.6 MMTCO₂e in 2018. Total U.S. emissions increased by 3.7 percent from 1990 to 2018. Overall, net emissions increased by 3.1 percent from 2017 to 2018 and decreased by 10.2 percent from 2005 to 2018. The decrease from 2005 to 2018 reflects long-term trends, including energy market trends, technological changes including energy efficiency, and energy fuel choices. Between 2017 and 2018, the increase in emissions was driven by an increase in CO_2 emissions from fossil fuel combustion, which was a result of increased energy use from greater heating and cooling needs due to a colder winter and hotter summer in 2018 compared to 2017. In 2018, the largest source of CO_2 and of overall emissions, was fossil fuel combustion, representing approximately 81.3 percent of U.S. GHG emissions (see Figure 3.6-2). CH_4 accounted for nearly 10 percent, N_2O accounted for approximately 6.5 percent, and the remaining 2.7 percent of U.S. GHG emissions were HFCs, PFCs, SF_6 , and NF_3 .

⁶ IPCC. 2014. Summary for Policymakers. In: AR5 Climate Change 2014, Mitigation of Climate Change. https://www.ipcc.ch/report/ar5/wg3/ (accessed October 2022)

⁷ US EPA. 2018. Emission Factors for GHG Inventories. https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf (accessed October 2022)

Figure 3.6-2 2018 U.S. GHG Emissions by Gas

2.7% HFCs, PFCs, SF₆ and NF₃ Subtotal



Source: US EPA 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2018.

CALIFORNIA

According to the California Air Resources Board (CARB), total California GHG emissions were 369.2 MMTCO₂e in 2020.⁸ The major source of GHGs in California is associated with transportation, contributing nearly 37 percent of Statewide GHG emissions in 2020. The industrial sector is the second largest source, contributing 20 percent of Statewide GHG emissions, and the electricity sector accounted for approximately 16 percent (see Figure 3.6-3).

⁸ CARB. 2022. California GHG Emissions for 2000 to 2020: Trends of Emissions and Other Indicators. https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf (accessed January 2023)

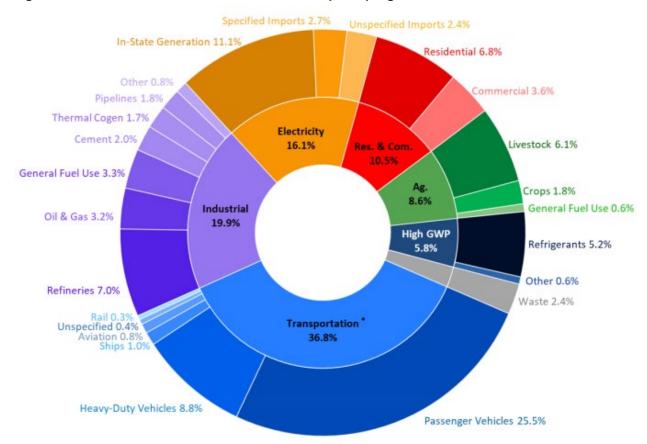


Figure 3.6-3 2020 California GHG Emissions by Scoping Plan Sectors and Sub-Sectors

Note: This figure breaks out 2020 California emissions by sector into an additional level of sub-sector categories. The inner ring shows the broad CARB Climate Change Scoping Plan sectors. The outer ring breaks out the sectors into sub-sectors or emission categories. The transportation sector represents tailpipe emissions from on-road vehicles and direct emissions from other off-road mobile sources; it does not include emissions from petroleum refineries and oil extraction and production, which are included in the industrial sector.

Source: CARB. 2022. California GHG Emissions for 2000 to 2020: Trends of Emissions and Other Indicators. https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf (accessed January 2023)

PLEASANT HILL (GENERAL PLAN AREA)

GHG emissions for 2022 within Pleasant Hill (the General Plan area) have been quantified in Table 3.6-2 below. The GHG emissions for area, energy, solid waste, and water sources were quantified using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0, and GHG emissions for mobile sources were quantified using the Emission FACtor (EMFAC) 2021 Model, Version 1.0.2. GHG emissions were modeled based on the following square footage and dwelling units for existing land use designations in the General Plan area:

Non-Residential Land Uses:

Commercial: 3,454,828 square feet

Office: 1,421,151 square feet
 Industrial: 1,647,368 square feet
 School: 1,084,833 square feet

Semi Public and Institutional: 396,137 square feet

Residential Land Uses:

Single-Family: 9,763 dwelling units

Multi-Family: 4,573 dwelling units

Table 3.6-2 2022 Pleasant Hill Annual GHG Emissions

Emission Source	Annual Emissions (MT CO₂e)	
Area	2,110	
Energy	43,857	
Mobile	264,799	
Solid Waste	12,317	
Waste	3,224	
Total	326,307	

Energy

Energy Fundamentals

Energy is generally transmitted either in the form of electricity, measured in kilowatts (kW) or megawatts (MW), or natural gas measured in British thermal units (BTU), cubic feet, or therms. Fuel, such as gasoline or diesel, is measured in gallons or liters.

ELECTRICITY

Electricity is used primarily for lighting, appliances, cooking purpose, HVAC equipment, and other uses associated with building and vehicle operations. Electricity sources range from renewable (hydroelectric, solar, wind, geothermal, biomass) to nonrenewable (natural gas, oil, nuclear, coal).

NATURAL GAS

Natural gas is used primarily for heating, water heating, and cooking purpose and is typically associated with building operations.

FUEL

Fuel is used primarily for powering off-road equipment and vehicles (commercial trucks and other vehicles). The typical fuel types used are diesel and gasoline.

Electricity Generation, Distribution and Storage

CALIFORNIA

According to the California Energy Commission (CEC), California generated approximately 277,764 gigawatt-hours (GWh) of electricity in 2021. As shown in Table 3.6-3, approximately 37.9 percent of this electricity was sourced from natural gas, 33.6 percent from renewable sources, 9.3 percent from nuclear, 9.2 percent from large hydroelectric sources, and the remaining 10 percent was sourced from coal, oil, other and unspecified sources. Specifically, the 33.6 percent of California's

2021 retail electric sales that were served by renewable resources included sources from wind, solar, geothermal, biomass, and small hydroelectric.⁹

Table 3.6-3 California 2021 Total System Electric Generation

Fuel Type	In-State Generation (GWh)	Percent of In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	State Energy Mix (GWh)	State Power Mix
Coal	303	0.2%	181	7,788	8,272	3.0%
Large Hydro	12,036	6.2%	12,042	1,578	25,656	9.2%
Natural Gas	97,431	50.2%	45	7,880	105,356	37.9%
Nuclear	16,477	8.5%	524	8,756	25,758	9.3%
Oil	37	0.00%	0	0	37	0.00%
Other (Petroleum/ Waste Heat)	382	0.2%	68	15	465	0.2%
Renewables	67,461	34.8%	11,555	14,317	93,333	33.6%
Biomass	5,381	2.8%	864	26	6,271	2.3%
Geothermal	11,116	5.7%	192	1,906	13,214	4.8%
Small Hydro	2,531	1.3%	304	1	2,835	1.0%
Solar	33,260	17.1%	220	5,979	39,458	14.2%
Wind	15,173	7.8%	9,976	6,405	31,555	11.4%
Unspecified	N/A	0.00%	8,156	10,731	18,887	6.8%
Total	194,127	100.00%	32,572	51,064	277,764	100.00%

GWh = gigawatt-hours

Source: CEC 2022. California 2021 Total System Electric Generation. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation (accessed October 2022)

Electricity is distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities, publicly owned LSEs, rural electric cooperatives, community choice aggregators, and electric service providers. ¹⁰

CONTRA COSTA COUNTY AND PLEASANT HILL

Contra Costa County as a whole consumed approximately 8,287 GWh of electricity in 2021 from residential and non-residential uses. ¹¹ Two electricity providers serve the City of Pleasant Hill: Marin Clean Energy (MCE) and Pacific Gas and Electric Company (PG&E). MCE provides clean energy that is 60 to 100 percent carbon free, either sourced entirely from renewable energy (50 percent solar and 50 percent wind) or 60.5 percent renewable (including biomass & biowaste, geothermal, small hydroelectric, solar, and wind). ¹² PG&E's default power mix offers 31 percent renewable, and they offer customers options for 64 percent or 100 percent renewable power mixes. ¹³¹⁴ In conjunction

⁹ CEC. 2022a. California 2021 Total System Electric Generation. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation (accessed October 2022)

¹⁰ CEC. 2021a. Electric Load-Serving Entities (LSEs) in California. https://www.energy.ca.gov/almanac/electricity_data/utilities.html (accessed October 2022)

¹¹ CEC. 2022b. Electricity Consumption by County. http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed October 2022)

¹² MCE. 2022. Annual Power Content Label. https://www.mcecleanenergy.org/energy-suppliers/ (accessed October 2022)

¹³ PG&E. 2021. 2020 Power Content Label Pacific Gas and Electric Company. https://www.energy.ca.gov/filebrowser/download/3882

¹⁴ PG&E. 2019. Where your electricity comes from. https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2020/1220-PowerContent-ADA.pdf

with the utility companies, the California Public Utilities Commission (CPUC) is involved in energy conservation programs.

Natural Gas Distribution

CALIFORNIA

According to the CPUC, natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. ¹⁵ Because natural gas is a dispatchable energy resource that provides load when the availability of hydroelectric power generation and/or other energy sources decrease, distribution varies greatly from year to year. The availability and distribution of hydroelectric-sourced energy, increasing renewable-source energy, and overall consumer demand are the variables that shape the need for natural gas.

CONTRA COSTA COUNTY AND PLEASANT HILL

Contra Costa County as a whole consumed approximately 1,062 million therms of natural gas in 2021 in both residential and non-residential uses. ¹⁶ PG&E is the natural gas provider for the City. The nearest PG&E gas transportation pipelines run along Contra Costa Boulevard and Hookston Road. There are two distribution gas pipelines located throughout Pleasant Hill. ¹⁷

Fuel Distribution

CALIFORNIA

According to the 2015 CEC market share data, California consists of distributors of gasoline, which include companies or individuals who make the first distribution of gasoline in California. Aircraft manufacturers and certificated or licensed carriers by air may be included within the definition of distributor. Distributors can also be "Brokers," which includes every person, other than a distributor or a retailer, who deals in lots of 200 or more gallons of gasoline. ¹⁸

Based on the California Transportation of Petroleum Second Northern California Refinery Safety Forum, output from the refineries is usually placed in intermediate tanks before blending finished products. Most gasoline is shipped from refinery by pipeline, which serves over 60 distribution terminals, which is then transported to retail and nonretail stations by tanker trucks. ¹⁹

PLEASANT HILL (GENERAL PLAN AREA)

There are 14 gasoline and diesel fueling stations within Pleasant Hill.

¹⁵ CPUC. 2021. Natural Gas and California.

https://www.cpuc.ca.gov/natural_gas/#:~:text=Natural%20gas%20from%20out%2Dof,interstate%20natural%20gas%20pipeline%20syste m.&text=The%20state's%20natural%20gas%20utilities%20operate%20over%20100%2C000%20miles%20of,more%20miles%20of%20service%20line (accessed October 2022)

¹⁶ CEC. 2022c. Gas Consumption by County. http://www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed October 2022)

¹⁷ PG&E. 2022. Explore our natural gas transmission pipeline map https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page (accessed October 2022)

¹⁸ CEC. 2015. Gasoline Market Share in California for 2014.

https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/market_share/ (accessed October 2022)

¹⁹ Schremp. 2015. California Transportation of Petroleum: Second Northern California Refinery Safety Forum. https://calepa.ca.gov/wpcontent/uploads/sites/6/2016/10/Refinery-Documents-2015yr-Petroleum.pdf (accessed October 2022).

Available Alternative Vehicle Fuels

Various Statewide regulations and plans encourage alternative fuel use to reduce GHG emissions and criteria pollutant emissions. These include the Low Carbon Fuel Standard and SB 32, as well as myriad other Statewide and local air district regulations. Conventional gasoline and diesel may be replaced with different alternative fuels, depending on the capability of the vehicle. Descriptions of the most widely used alternative fuels include the following:

- Electricity can power electric and plug-in hybrid electric vehicles directly from the power grid.
 Generally, these vehicles draw from the electricity grid and store the energy in their batteries.
 Pleasant Hill has 10 electric vehicle charging stations throughout Pleasant Hill.²⁰
- **Biodiesel** is a renewable alternative fuel that can be manufactured from vegetable oils, animal fats, or recycled restaurant grease. Biodiesel is biodegradable and cleaner-burning than petroleum-based diesel fuel. Generally, biodiesel can run in any diesel engine without alterations, but fueling stations have been slow to make it available. There are eleven biodiesel refueling stations in California, but none in the City of Pleasant Hill. According to the USDOE, the closest biodiesel station to Pleasant Hill is in the City of Berkeley.²¹
- Compressed natural gas (CNG) and liquefied natural gas (LNG) is currently being used in vehicles. CNG is used in light-, medium-, and heavy-duty vehicles and gets about the same fuel economy. LNG is costly to produce and therefore is used in limited applications, typically in medium- and heavy-duty vehicles. There are no CNG stations and no LNG stations within Pleasant Hill. The nearest CNG station is in the City of Concord and the nearest LNG station is in the City of Lathrop.²²
- Hydrogen is being explored for use in combustion engines and fuel cell electric vehicles. The interest in hydrogen as an alternative transportation fuel stems from its clean-burning qualities, its potential for domestic production, and the fuel cell vehicle's potential for high efficiency: hydrogen is two to three times more efficient than gasoline. The closest station to Pleasant Hill is in the City of Concord. Fuel cells are being explored as a way to use electricity generated on-board the vehicle to power electric motors. Pleasant Hill does not have any hydrogen stations. ²³

Existing Energy Use

CALIFORNIA

According to the U.S. Energy Information Administration (USEIA), total electricity direct consumption within California in 2018 was 12,859.245 GWh, up 0.5 percent, or 64.385 GWh, from 2017. California electricity consumption in 2018 represented approximately 9 percent of total U.S. electricity consumption in $2018.^{24}$

In 2018, total California natural gas demand for industrial, residential, commercial, and electric power generation was 2,137,920 million cubic feet per year (MCF/year).

The main category of fuel use in California is transportation fuel, specifically gasoline and diesel. Gasoline is the most used transportation fuel in California: 97 percent of all gasoline sold in California is consumed by light-duty cars, pickup trucks, and sport utility vehicles. In 2018, an estimated 143,080 million gallons of gasoline annually were used (i.e., 392 million gallons gasoline

 $^{^{20}\,} USDE.\, 2022.\, https://afdc.energy.gov/fuels/electricity_locations.html\#/find/nearest?fuel=ELEC\&location=pleasant\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20hill,\%20$

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ USEIA. 2020. California Electricity Profile 2018. https://www.eia.gov/electricity/state/archive/2018/california/.

per day), marking a record level of consumption between 1997 and 2020.²⁵ Diesel is the second largest transportation fuel used in California. Many heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm, construction, and heavy-duty military vehicles and equipment have diesel engines. According to the 2019 California Annual Retail Fuel Outlet Report Results (CEC-A15), in 2018, 1,752 million gallons of diesel annually (i.e., 4.8 million gallons of diesel per day), including off-road diesel, was sold.²⁶

PLEASANT HILL (GENERAL PLAN AREA)

As shown in Table 3.6-4, approximately 402 million gallons of transportation fuel were consumed in Contra Costa County in 2021, of which approximately 374 million gallons were gasoline and approximately 28 million gallons were diesel fuel. ²⁷ This equates to approximately 1.1 million gallons of fuel per day or 0.95 gallons of fuel per person per day, based on a 2022 countywide population of 1,156,555 people. ²⁸

The City of Pleasant Hill consumed approximately 11 million gallons of gasoline in 2021.²⁹ This equates to approximately 0.03 million gallons of fuel per day or 0.89 gallons of fuel per person per day, based on a 2022 citywide population of 34,026 people.³⁰

According to the CEC, one gallon of gasoline is equivalent to approximately 109,786 Btu, while one gallon of diesel is equivalent to approximately 127,460 Btu.³¹ Based on this formula, approximately 122.2 billion Btu in transportation fuel were consumed per day in 2021 in Contra Costa County, while 3.3 billion Btu in gasoline was consumed per day in 2020 in the City (see Table 3.6-4).

Table 3.6-4 Transportation Energy Consumption in Contra Costa County and Pleasant Hill

Fuel Type	2021 Annual Fuel Use (million gallons)	2021 Daily Fuel Use (million gallons)	2020 Daily Energy Use (billions of Btu)	2020 Daily per Capita Energy Use (thousands of Btu)
Gasoline (County)	374	1.02	112.0	96.8
Diesel (County)	28	0.08	10.2	8.8
Total (County)	402	1.1	122.2	105.6
Gasoline (City)	11.0	.03	3.3	96.8

Notes: Btu = British thermal units

Source: CEC. 2022.

²⁵ CEC. 2022d. California Gasoline, Data, Facts, and Statistics. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (October 2022)

²⁶ CEC. 2022e. 2010-2021 CEC-A15 Results and Analysis – Diesel Sales by County. https://www.energy.ca.gov/media/3874.

²⁷ CEC. 2022f. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting (accessed October 2022)

²⁸ California Department of Finance (CDF). 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2022 with 2010 Census Benchmark. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed October 2022)

²⁹ CEC. 2022d. 2010-2019 CEC-A15 Results and Analysis – Diesel Sales by County. https://www.energy.ca.gov/media/3874.

³⁰ CDF. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2022 with 2010 Census Benchmark. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed October 2022)

³¹ Schremp, Gordon. 2017. Senior Fuels Specialist, California Energy Commission. Personal communication via phone and email regarding fuel consumption in California by County and by source with Lance Park, Associate Planner, Rincon Consultants, Inc. August 22, 2017.

3.6.3 Regulatory Framework

Additional regulatory information related to GHG emissions and energy efficiency standards are included throughout the other resource sections including Section 3.13, *Utilities and Service Systems*, which includes discussion of water use efficiency standards, solid waste standards, and wastewater standards, and Section 3.2, *Air Quality*, which includes discussion of air quality related regulations.

Federal Regulations

Clean Air Act (Regulation of GHGs)

The United States Environmental Protection Agency (US EPA) issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the US EPA has not promulgated regulations on GHG emissions, but it has already begun to develop them.

Federal Fuel Efficiency Standards (CAFE)

Under the Clean Air Act, corporate average fuel economy (CAFE) standards have been set for passenger cars and light trucks. The State of California has traditionally had a waiver to set its own more stringent fuel efficiency standards. However, on August 2, 2018, the NHTSA and US EPA, operating under the direction of the Trump Administration, proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule). This rule addresses emissions and fuel economy standards for motor vehicles and is separated in two parts as described below.

- Part One, "One National Program" (84 FR 51310) revokes a waiver granted by US EPA to the State of California under Section 209 of the CAA to enforce more stringent emission standards for motor vehicles than those required by US EPA for the explicit purpose of GHG reduction, and indirectly, criteria air pollutants and ozone precursor emission reduction. This revocation became effective on November 26, 2019, potentially restricting the ability of CARB to enforce more stringent GHG emission standards for new vehicles and set zero emission vehicle mandates in California.
- Part Two addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026. The proposal addressing CAFE standards was jointly developed by NHTSA and US EPA, with US EPA simultaneously proposing tailpipe CO₂ standards for the same vehicles covered by the same model years.

Construction Equipment Fuel Efficiency Standard

US EPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower (hp) and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 hp and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements are contained in 40 Code of Federal Regulations Parts 1039, 1065,

and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and most recently updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were to be completely phased in by the end of 2015.

U.S. Consolidated Appropriations Act (Mandatory GHG Reporting)

The Consolidated Appropriations Act, passed in December 2007, required the establishment of mandatory GHG reporting requirements. In September 2009, the US EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S., and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the US EPA. The first annual reports for the largest emitting facilities, covering calendar year 2010, were submitted to US EPA in 2011.

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration, a part of the U.S. Department of Transportation (USDOT), for establishing and regularly updating vehicle standards. The U.S. Environmental Protection Agency (US EPA) administers the Corporate Average Fuel Economy (CAFE) program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and can increase to 54.5 by 2025.

On August 2, 2018, the NHTSA and US EPA, operating under the direction of the Trump Administration, proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule). This rule addresses emissions and fuel economy standards for motor vehicles and is separated in two parts as described below.

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State Regulations

Assembly Bill 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493 (2002), California's Advanced Clean Cars program (referred to as Pavley), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, US EPA granted the waiver of the Clean Air Act preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016, and Pavley II, which is now referred to as "Low Emission Vehicle (LEV) III GHG", regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

Assembly Bill 32 (Global Warming Solutions Act and Scoping Plan)

California's major initiative for reducing GHG emissions is outlined in Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 million MTCO₂e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan Update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide goals. The 2013 Scoping Plan Update highlighted California's progress toward meeting the 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use. The State of California achieved its 2020 GHG emission reduction targets in 2016, and emissions have subsequently fallen further in 2018 to 425 MMTCO₂e.

Senate Bill 32 (Global Warming Solutions Act and Scoping Plan Extension)

Senate Bill (SB) 32 signed into law on September 8, 2016, tightens the requirements of AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, it recommends that local governments adopt policies consistent with statewide per capita goals of 6 MTCO₂e by 2030 and 2 MTCO₂e by 2050. As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level).

AB 1279 (California Climate Crisis Act and Scoping Plan Extension)

The California Climate Crisis Act (AB 1279), signed into law on September 16, 2022, requires the State to achieve and maintain net zero GHG emissions as soon as possible, but not later than 2045. The Climate Crisis Act also requires the State to reduce Statewide anthropogenic GHG emissions to 85 percent below the 1990 levels by 2045. Updates to the scoping plan are required to identify and recommend measures to achieve these goals and identify and implement policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in the State.

On November 16, 2022, CARB also adopted the 2022 Scoping Plan, which provides a framework for achieving targets for carbon neutrality and reducing anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The 2022 Scoping Plan relies on significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

Senate Bill 100 (100 Percent Clean Energy Act)

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. PCE provides clean energy that is 100 percent carbon free, either sourced entirely from renewable energy (50 percent solar and 50 percent wind) or 52.2 percent renewable (including biomass & waste, geothermal, small hydroelectric, solar, and wind). PCE aims to provide only 100 percent renewable by 2025. (PCE 2022). PG&E's default power mix offers 29 percent renewable, and they offer customers options for 64 percent or 100 percent renewable power mixes.

Senate Bill 375 (Sustainable Communities and Climate Protection Act)

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On

March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

Senate Bill 97 and CEQA Guidelines Update

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Natural Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

California Code of Regulations Title 24 (California Building Code)

Updated every three years through a rigorous stakeholder process, Title 24 of the California Code of Regulations requires California homes and businesses to meet strong energy efficiency measures, thereby lowering their energy use. Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The California Building Code is applicable to all development in California. (Health and Safety Code §§ 17950 and 18938(b).) The regulations receive input from members of industry, as well as the public, with the goal of "[r]educing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy." (Pub. Res. Code § 25402.) These regulations are scrutinized and analyzed for technological and economic feasibility (Pub. Res. Code § 25402(d)) and cost effectiveness (Pub. Res. Code § 25402(b)(2) and (b)(3)).

PART 6 - BUILDING ENERGY EFFICIENCY STANDARDS

CCR Title 24 Part 6 is the Building Energy Efficiency Standards. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. The Building Energy Efficiency Standards is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission. Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and residential buildings will be seven percent more energy efficient. When accounting for the electricity generated by the solar photovoltaic system, residential buildings would use 53 percent less energy compared to buildings built to the 2016 standards.

The 2019 Building Energy Efficiency Standards, adopted on May 9, 2018, became effective on January 1, 2020. The 2019 Standards move toward cutting energy use in new residential units by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less. The 2019 Standards focus on four key

areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements. Under the 2019 Standards, non-residential buildings will be 30 percent more energy-efficient compared to the 2016 Standards, and single-family homes will be seven percent more energy efficient. The 2022 Standards have been adopted and will come into effect January 1, 2023. Development facilitated by the 2040 General Plan would be subject to the 2022 Standards.

PART 11 - CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to CCR Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). Current CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

Mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;
- 50 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards; and
- Installation of EV charging stations at a rate of at least three percent of the parking spaces for all new multi-family developments with 17 or more units.

Similar to the compliance reporting procedure for demonstrating Building Energy Efficiency Standards compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

Assembly Bill 341/Assembly Bill 1826 (Mandatory Recycling/Composting)

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows diversion away from landfills of 75 percent of all solid waste by 2020 and annually thereafter. AB 1826 requires recycling of organic waste (i.e., composting). All businesses and public entities that generate four or more cubic yards of solid waste per week and multi-family residential dwellings that have five or more units are required to recycle and compost.

Senate Bills 350 and 100 (Renewable Portfolio/Clean Energy and Pollution Reduction Act)

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be

increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency in existing buildings by 2030.

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

Assembly Bill 1493 (Reduce GHG Emissions from Vehicle Use)

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley Bill, amended Health and Safety Code Sections 42823 and added 43018.5 requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles, lightduty trucks, and other vehicles used for noncommercial personal transportation in California.

Assembly Bill 1007 (State Alternative Fuels Plan)

AB 1007 (Chapter 371, Statutes of 2005) required the CEC to prepare a State plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other federal, State, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality.

CARB In-Use On-Road and Off-Road Diesel Rules

The CARB rule imposes limits on idling, restricts the addition of older vehicles, and requires the retirement or replacement of older engines depending on their fleet size category. This policy indirectly impacts energy consumption. More specifically, CARB is also charged with developing air pollution control regulations based upon the best available control measures and implementing feasible control measures under the State and Federal Clean Air Act. (Health & Saf. Code, §§ 39602.5, 39667, 43013, subds. (a) and (h), 43018, 40600, 40601, 40612(a)(2) and (c)(1)(A).) Pursuant to these statutory authorities , more stringent emission standards were adopted in 2004 for offroad construction equipment (i.e. "Tier 4" standards) (40 Code of Federal Regulations Parts 1039, 1065, and 1068; Cal. Code Regs., tit. 13, § 2025; AR 2854). CARB also adopted emission standards for on-road heavy duty diesel vehicles (i.e. haul trucks). (Cal. Code Regs., tit. 13, § 1956.8.) These haul truck regulations mandate fleet turn-over to ensure that by January 1, 2023 nearly all on-road diesel trucks will have 2010 model year engines or equivalent [i.e. Tier 4]. In addition, interim steps are incorporated into the regulations (e.g., vehicles older than 1999 will be replaced with newer engines by 2020).

California Advance Clean Trucks Program

In June 2020, CARB approved the Advanced Clean Trucks regulation, which requires manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. In addition, the regulation requires company and fleet reporting for large employers and fleet owners with 50 or

more trucks. By 2045, all new trucks sold in California must be zero-emission. Implementation of this regulation would reduce consumption of nonrenewable transportation fuels as trucks transition to alternative fuel sources.

Executive Order B-48-18 (Zero-Emission Vehicles)

On January 26, 2018, Governor Brown signed Executive Order B-48-18 requiring all State entities to work with the private sector to have at least 5 million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle (EV) charging stations by 2025. It specifies that 10,000 of the EV charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan, along with the 2018 ZEV Action Plan Priorities Update, which includes and extends the 2016 ZEV Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016, 2018), to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities.

Executive Order N-79-20 (Zero Emissions Vehicles Sales)

Governor Gavin Newsom signed Executive Order N-79-20 in September 2020, which sets a statewide goal that 100 percent of all new passenger car and truck sales in the State will be zero-emissions by 2035. It also sets a goal that 100 percent of statewide new sales of medium- and heavy-duty vehicles will be zero emissions by 2045, where feasible, and for all new sales of drayage trucks to be zero emissions by 2035. Additionally, the Executive Order targets 100 percent of new off-road vehicle sales in the State to be zero emission by 2035. CARB is responsible for implementing the new vehicle sales regulation.

Senate Bill 1020

Senate Bill 1020 (SB 1020), signed into law on September 16, 2022, requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035, 95 percent by 2040, and 100 percent by 2045. All State agencies facilities must be served by 100 percent renewable and zero-carbon resources by 2030. SB 1020 also requires the Public Utilities Commission, Energy Commission, and CARB to issue a joint progress report outlining the reliability of the electrical grid with a focus on summer reliability and challenges and gaps. Additionally, SB 1020 requires the Public Utilities Commission to define energy affordability and use energy affordability metrics to develop protections, incentives, discounts, or new programs for residential customers facing hardships due to energy or gas bills.

CARB Gas Appliances Sales Ban

As part of the 2022 State Implementation Plan, CARB adopted a ban on new sales of natural gas heaters, water heaters, and furnaces by 2030 in September of 2022. This new measure is intended to reduce emissions from new residential and commercial space and water heaters sold in the State. An emission standard for space and water heaters will go into effect in 2030. Beginning in 2030, 100 percent of the sales of new natural gas-powered heaters and water heaters would need to comply with the emission standard, such as putting in electric heaters or other zero-emission options.

Regional and Local Regulations

Plan Bay Area 2050

Plan Bay Area 2050 is a State-mandated, integrated long-range transportation, land-use, and housing plan, known as a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area. Plan Bay Area 2050 builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2050 focuses on advancing equity and improving resiliency in the Bay Area by creating strategies in the following four elements: Housing, Economy, Transportation, and Environment. The Plan discusses how the future is uncertain due to anticipated employment growth, lack of housing options, and outside forces, such as climate change and economic turbulence. These uncertainties will impact growth in the Bay Area and exacerbate issues for those who are historically and systemically marginalized and underserved and excluded. Thus, Plan Bay Area 2050 has created strategies and considered investments that will serve those systemically underserved communities and provide equitable opportunities. The Plan presents a total of 35 strategies to outline how the \$1.4 trillion dollar investment would be utilized. The strategies include, but are not limited to, the following: providing affordable housing, allowing higher-density in proximity to transit-corridors, optimizing the existing roadway network, creating complete streets, providing subsides for public transit, reducing climate emissions, and expanding open space area. To bring these strategies to fruition, it will require participation by agencies, policymakers, and the public. An implementation plan is also included as part of the Plan to assess the requirements needed to carry out the strategies, identify the roles of pertinent entities, create an appropriate method to implement the strategies, and create a timeline for implementation.

Contra Costa Countywide Transportation Plan (CTP)

In 2017, the Contra Costa County Transportation Authority adopted the CTP to provide a blueprint for Contra Costa County's transportation system over the coming decades. The CTP identifies projects, programs, and policies that the Contra Costa County Transportation Authority hopes to pursue. The CTP identifies goals for bringing together all modes of travel, networks and operators, to meet the diverse needs of Contra Costa County and to support Plan Bay Area. The CTP also lays out a vision for the future of transportation in Contra Costa County, the goals and strategies for achieving those visions, and the future of transportation investments needs to promote a growing economy, advance technological changes, protect the environment, and improve quality of life.

Pleasant Hill Municipal Code Title 14

Chapter 14.05 of Title 14 adopts by reference and incorporates the California Building Standards Code, 2019 Edition, Title 24. This includes adoption of Title 24 Part 6, the California Energy Code, and Title 24 Part 11, the California Green Building Standards Code (CALGreen).

3.6.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 *CEQA Guidelines* Appendix G significance criteria questions related to GHG Emissions and Energy.

Would the 2040 General Plan:

- a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?
- c) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- d) Conflict with or obstruct a State of local plan for renewable energy or energy efficiency?

Approach to Analysis

GHG Emissions

Based on plan-level guidance from the 2022 BAAQMD CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans, GHG emissions associated with implementation of the 2040 General Plan are discussed qualitatively by comparing the proposed plan to the 2022 BAAQMD GHG thresholds. In addition, the proposed plan is qualitatively compared to other applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs.

Energy

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during construction of development facilitated by the proposed plan, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the construction site. Operational energy demand accounts for the anticipated energy consumption during operation of the development facilitated by the proposed plan, such as fuel consumed by cars, trucks, and public transit; natural gas consumed for on-site power generation and heating building spaces; and electricity consumed for building power needs, including, but not limited to lighting, water conveyance, and air conditioning. This analysis considers the equipment and processes employed during construction and operation of development facilitated under the 2040 General Plan to qualitatively determine whether energy consumed during construction and operation would be wasteful, inefficient, or unnecessary. In addition, the proposed plan is qualitatively compared to applicable plans adopted for the purpose of reducing non-renewable and overall energy consumption.

EIR Scoping Comments Consideration

This section also addresses comments received in response to the EIR NOP related to the analysis and impact of GHG emissions with implementation of the 2040 General Plan. Assessment of GHG emissions is discussed under impact GHG-1.

Specific Thresholds of Significance

GHG Emissions Generation

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of

climate change typically involves an analysis of whether a plan or project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

At the plan level, the 2022 BAAQMD CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans contains two approaches for determining significance of GHGs:

- 1. Evaluation of whether a plan or project meets State goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or
- 2. Evaluation of consistency with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

If a plan is not consistent with one of these approaches, it could be considered to have an incremental significant impact on GHG emissions.

According to CEQA Guidelines Section 15183.5 and the 2022 BAAQMD CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans, a qualified GHG reduction strategy must:

- Quantify GHG emissions, both existing and projected over a specified period, resulting from activities in a defined geographic area
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated in the geographic area
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels
- Be adopted in a public process following environmental review

The City of Pleasant Hill has not adopted a qualified GHG reduction strategy or a plan that meets State goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045.

Energy

The City of Pleasant Hill does not have quantitative thresholds for evaluation of energy; however, the following qualitative thresholds are used to evaluate the significance of energy impacts resulting from implementation of the proposed plan if it would:

- Result in a wasteful, inefficient, and unnecessary consumption of energy during construction and operational activities; or if
- Construction and operation of buildings and appliances would not adhere to the energy-use reduction measures included in CALGreen.

Impact Evaluation

GHG Emissions Generation and GHG Reduction Plans Consistency

Significance Criterion a: Would the proposed plan generate GHG emissions, either directly or

indirectly, that may have a significant impact on the environment?

Significance Criterion b: Would the proposed plan conflict with an applicable plan, policy, or

regulation adopted for the purpose of reducing the emissions of GHGs?

Impact GHG-1 Pleasant Hill does not have a Climate Action Plan. Therefore, implementation of the 2040 General Plan would not meet State 2030 and 2045 Goals. Mitigation Measures GHG-1 and GHG-2 would result in adoption of CEQA GHG thresholds and a Climate Action Plan; however, development facilitated by the 2040 General Plan would not meet the 2030 and 2045 goals until the CAP is adopted. This impact would be significant and unavoidable.

Construction

Development facilitated by the 2040 General Plan would result in GHG emissions during construction. GHG emissions during construction would result primarily from fuel consumption associated with heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment that may result in indirect GHG emissions from the energy generation. Development facilitated by the 2040 General Plan would incorporate BAAQMD best management practices to reduce GHG emissions during construction activities. Development facilitated by the 2040 General Plan would also utilize construction contractors that comply with applicable CARB regulations such as accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment, and restricted idling of heavy-duty diesel motor vehicles. Construction contractors are required to comply with the provisions of CCR Title 13, sections 2449 and 2485, prohibiting dieselfueled commercial and off-road vehicles from idling for more than five minutes, minimizing unnecessary GHG emissions. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would minimize inefficient fuel consumption and thus GHG emissions. These construction equipment standards (i.e., Tier 4 efficiency requirements) are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Per applicable regulatory requirements of CALGreen, development facilitated by the 2040 General Plan would comply with construction waste management practices to divert construction and demolition debris from landfills. These practices would result in efficient use of energy by construction facilitated by the 2040 General Plan and, therefore, would minimize unnecessary GHG emissions. Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary, which would also have the effect of minimizing GHG emissions.

Pursuant to the 2022 BAAQMD CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans, BAAQMD does not recommend a construction-related climate impact threshold. According to BAAQMD, greenhouse gas emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions that represent the vast majority of project GHG emissions. Therefore, the evaluation of GHG emissions impacts associated with implementation of the 2040 General Plan is focused on operational emissions, discussed below.

Operation

GHG EMISSIONS GENERATION

Development facilitated by the 2040 General Plan would result in GHG emissions during operation. GHG emissions during operation would result primarily from building energy usage and transportation fuel consumption associated with light-duty vehicles. The 2040 General Plan contains policies that aim to increase connectivity and promote travel by alternative modes and increase energy efficient building related energy use and renewable energy sources to reduce operational GHG emissions. Proposed 2040 General Plan policies related to GHG emissions reductions include:

- Goal LU-3 To provide a variety of housing types that offer choices for Pleasant Hill residents and create complete, livable neighborhoods.
 - **Policy LU-3.2** Connectivity. Encourage new residential and mixed-use development to incorporate design features that promote walking within neighborhoods and citywide.
 - **Policy LU-3.4 Clustering Development.** Encourage new residential development to be clustered to support increased densities, open space, and efficiencies of public facilities and services.
- Goal LU-4 To ensure that commercial and mixed-use development in the city is consistent with the overall community character and serves the existing and future needs of residents and visitors.
 - Policy LU-4.3 Neighborhood Connectivity. Encourage commercial and mixed-use development to link to adjoining residential neighborhoods by incorporating well-designed and attractive streetscapes with sidewalks, bicycle paths, and street amenities.
 - **Policy LU-4.4 Capture Local Spending.** Encourage the development of a broad range of commercial uses that capture a greater share of local spending and reduce residents' reliance upon travel to nearby communities.
 - **Policy LU-4.5 Vertical and Horizontal Mixed-use.** Encourage vertical and horizontal mixed-use development at key intersections and within neighborhoods that result in distinct and cohesive pedestrian-oriented places that provide additional neighborhood-serving amenities and intensified economic vitality.
- Goal LU-6 Create distinct and identifiable places for future development within Pleasant Hill that enhance community character, prosperity, and civic pride.
 - Policy LU-6.2 Encourage the creation of a DVC District. Encourage development of a vibrant, walkable district centered around DVC and Golf Club Road that includes student and faculty housing, retail, and daily service uses for students, faculty, and staff.
 - **Policy LU-6.4 Enhanced Connectivity.** Support the expansion of alternative transportation options including enhancements to the multi-use trail, expanded bike lanes along Golf Club Road, and additional connections between new and existing development.

- **Policy LU-6.16 Walkable Environment.** Enhance the pedestrian connections between Downtown, Crescent Drive, City Hall, and adjacent commercial centers along Contra Costa Boulevard.
- **Policy LU-6.25** Transit-Oriented Development. Encourage the design and development of transit-oriented developments along Contra Costa Boulevard to support future transportation system enhancements.
- **Policy LU-6.27** Pedestrian Oriented Development. Support the transformation of existing auto-oriented and strip commercial uses into attractive pedestrian-oriented developments that enhance the visual character and interest of the boulevard.
- **Policy LU-6.31** Increased Residential Development. Support increased residential development along Contra Costa Boulevard in the form of either vertical or horizontal mixed-use projects.
- **Policy LU-6.34** Transform Gregory Lane. Support the transformation of Gregory Lane into an attractive streetscape that includes neighborhood-serving mixed-use with active frontages facing the street, wider sidewalks, expanded bicycle lanes, and consistent landscaping.
- **Policy LU-6.48** Pedestrian Connectivity. Require Monument Boulevard pedestrian upgrades including signalized crossings, bulb outs, and expanded sidewalks.
- **Policy LU-6.53** Increased Residential Development. Support increased residential development along Monument Boulevard in the form of either vertical or horizontal mixed-use projects.
- Goal LU-7 Improve the health and well-being of all Pleasant Hill residents.
 - **Policy LU-7.2** Alternative Transportation Improvements. Support new development and infrastructure improvements in existing neighborhoods that enable and encourage people to drive less and walk, bike, or take public transit more.
 - **Policy LU-7.3** Remove Physical Barriers. Remove or plan for ways to address physical barriers that bisect neighborhoods and discourage walking or biking.

Land Use Element Implementation Programs

- Program L Pedestrian and Bicycle Barrier Removal. Prepare an analysis of the physical barriers to walking and bicycling throughout the city. Identify options for and prepare a program for barrier removal. The analysis should include improvement prioritization, cost estimates, funding sources, and a timeline for improvements.
- Goal TC-1 Establish and maintain a safe and efficient circulation system that emphasizes the use of existing arterial and collector roadways, paths, and bike lanes.
 - **Policy TC-1.2 Multimodal Travel Options.** Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.

Goal TC-2 Improve traffic circulation along the city roadway network.

- Policy TC-2.5 Transportation Demand Management (TDM). Require robust transportation demand management with all new private development that requires establishment of incentives and programs to reduce traffic congestion including annual reporting to ensure transportation demand management goals for a project are being met and to correct transportation demand management practices.
- Policy TC-2.6 Safe Routes to School (SR2S). Establish a Safe Routes to School program in collaboration with the school districts and private schools that identifies and promotes suggested routes to school and incentivizes students and parents to use alternative transportation modes for school commutes.

Goal TC-4 Reduce congestion and vehicle trips through land use planning.

- **Policy TC-4.4 Infill Development.** Support infill and development in existing urban areas and around key transit facilities.
- Policy TC-4.5 Correlation Between Land Use and Transportation. Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.
- Goal TC-5 Support a vibrant, walkable environment that encourages alternative (non-driving) modes of transportation.
 - Policy TC-5.1 Evaluate Multimodal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).
 - **Policy TC-5.3 Mobility Technology Support.** Identify and implement technology that supports walking, biking, commuting, and other alternative transportation modes within the City including infrastructure that supports micro mobility use within the City.
- Goal TC-6 Reduce reliance on the automobile by promoting alternative modes of transportation.
 - **Policy TC-6.1** Encourage Non-Driving Forms of Personal Mobility. Encourage bicycling, walking, and other forms of personal mobility, like e-scooters, e-bikes, and neighborhood electric vehicles, as energy conserving, non-polluting modes of travel.
 - **Policy TC-6.2 Private Development of Transportation Facilities.** Encourage private entities to develop and maintain publicly accessible transportation facilities, including transit, pedestrian, and bicycle facilities.

- **Policy TC-6.3** Non-Vehicular Transportation Requirement. Require new developments that would result in significant increases in air pollution, VMT or noise to incorporate non-vehicular facilities or programs that would reduce the overall project impacts on these resources including e-Bike charging stations and free use e-Bike pod stations for residential and commercial development.
- Policy TC-6.4 Amenities for Non-Driving Modes of Transportation. Require new development with more than 10 housing units or over 5,000 square feet of non-residential uses to include amenities that encourage active modes of transportation that reduce pollution or VMT as a benefit to the community (e.g., bicycle lockers/racks, showers, dedicated vanpool or carpool parking areas, dedicated shuttle services, e-bike charging stations innovative bus shelter designs).
- Policy TC-6.5 Encourage Development of Alternative Fuel Infrastructure. Encourage development of infrastructure (public and private) to support the use of electric and other alternative fuel vehicles.
- Goal TC-8 Encourage the development of a comprehensive and integrated transportation network with infrastructure and design features that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, youth, and families.
 - **Policy TC-8.1** Complete Streets Principles. Apply complete streets principles when building new, or rehabilitating existing, roadways, consider the following design elements:
 - Sidewalks and curbs as a standard design principle.
 - Bicycle lanes and/or shared lanes as a standard design principle.
 - Transit accessibility as a standard design principle.
 - Shade trees and planting strips as a standard design principle along roadways
 - **Policy TC-8.2 Review for Complete Streets.** Review street reconstruction, new development, and utility projects to incorporate complete street elements when feasible, including trails, bus stop enhancements, and bicycle/pedestrian facilities.
 - **Policy TC-8.3** Regional Complete Streets Planning. Coordinate internally and with other agencies to plan for the provision of complete streets regionally.
 - **Policy TC-8.4 Multi-Modal Roadways.** Consider the needs of vehicles, bicycle, and pedestrians on all city roadways and facilities.
 - **Policy TC-8.6 Wide Sidewalks for Shared Use.** Provide wide sidewalks to allow shared use by pedestrians, bicyclists, and non-motorized modes of transportation as directed by the City Engineer.
 - **Policy TC-8.7 Limit Roadway Widening.** Limit roadway widening and prioritize bicycle and pedestrian facility improvements within the right of way to increase roadway capacity that does not conflict with emergency access requirements.

- Goal TC-9 Prioritize a safe and connected pedestrian network for users of all ages and abilities.
 - **Policy TC-9.1** Pedestrian Safety. Maintain and upgrade the City's pedestrian system by installing or upgrading sidewalks, warning devices, crosswalks, and other pedestrian aids where appropriate, including particular consideration for the needs of users of all ages and abilities.
 - **Policy TC-9.2** Pedestrian Connections. Require new development to use best practices in providing pedestrian connections between sites and existing and planned pedestrian facilities, including those identified in the Bicycle and Pedestrian Master Plan and other relevant plans and documents.
 - **Policy TC-9.3 Enhance Pedestrian Crossings.** Enhance pedestrian crossings on all arterial and collector roadways.
 - Policy TC-9.4 Sidewalk Maintenance. Maintain existing sidewalk to meet ADA requirements, including removal or relocation of objects obstructing pedestrian path and installation of wider or detached sidewalks with a buffer separation from vehicular traffic, where feasible.
 - **Policy TC-9.5 Sidewalk Guidelines and Standards.** Establish sidewalk standards and guidelines for enhancing existing sidewalk and installation of new sidewalks.
 - Policy TC-9.6 Planning for Pedestrian Improvements. Ensure all planning processes, such as PUD Concept Plans, master plans and specific plans, identify areas where pedestrian improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting, and new street furniture.
 - **Policy TC-9.7 Enhance Street Lighting.** Enhance street lighting to provide for better pedestrian safety.
 - **Policy TC-9.8 Sidewalk Improvements.** Improve sidewalks to facilitate access by users of all ages and abilities.
 - **Policy TC-9.9 Sidewalk Plan.** Create a sidewalk plan that identifies high-priority sidewalk throughout the city and establishes an implementation plan for eliminating the sidewalk gaps and enhancement.
- Goal TC-11 Increase the number of bicycle and pedestrian trips by users of all ages and abilities.
 - **Policy TC-11.1 Bicycle and Pedestrian Network.** Support a network of safe and comfortable bikeway and pedestrian facilities connecting neighborhoods and destinations in Pleasant Hill and adjacent jurisdictions.
 - **Policy TC-11.2 Street Design.** Require street cross-sections to accommodate bicyclists, micro-mobility users, and pedestrians.
 - **Policy TC-11.3 Protected Bicycle Facilities.** Consider incorporating protected bicycle and pedestrian facilities in higher density land use areas and along major transportation corridors to the greatest extent feasible.

- Goal TC-13 Reduce congestion and vehicle trips through non-automobile transportation.
 - **Policy TC-13.1** Bus and Rail Services. Coordinate with local transit providers (i.e., bus, paratransit, and rail service) to provide expanded schedules and services that meet the needs of Pleasant Hill residents.
 - Policy TC-13.2 Innovative Transportation Technologies. Work with transit providers, employers, schools, and developers to encourage innovative technologies that promote more effective and expanded use of transit and facilitate other innovations to serve first and last mile travel, such as mobility hubs and micro-mobility (e-scooters, e-bikes).
 - **Policy TC-13.3** Support County Connection Improvements. Support County Connection to improve all types of accessibility and comfort for their facilities and to incorporate intermodal facilities where feasible.
 - Policy TC-13.4 Transit for Commuters and Special Needs Populations. Work with transit providers and other regional TDM entities to promote and incentivize use of transit for commuters, seniors, students, and persons with disabilities.
 - **Policy TC-13.5 Senior Van Service.** Maintain the City's Senior Van Service for residents over the age of 55, subject to the availability of funding.
- Goal TC-15 Reduce vehicle trips and vehicle trip lengths and manage vehicle congestion through a comprehensive program of transportation resources and services.
 - **Policy TC-15.1 TDM Alternatives.** Meet the increased transportation needs of the community with TDM alternatives.
 - **Policy TC-15.2** Require TDM Programs. Require new development to implement appropriate TDM programs to encourage walking, biking, carpooling, and transit use, and to reduce vehicle trips.
 - **Policy TC-15.3 TDM for New Development.** All new development with more than 10 housing units or over 5,000 square feet of non-residential uses shall be required to include a detailed and measurable TDM program.
 - **Policy TC-15.6 TDM Measures for Non-Residential Land Uses.** Encourage measures to reduce vehicular trips and vehicle-miles travelled (VMT). Examples are the provision of on-site childcare and after-school care facilities, and on-site modular mini-conference rooms for virtual meetings.

Transportation and Circulation Element Implementation Programs

- **Program G Non-automobile Commute Incentives.** Prepare an analysis of potential incentives to encourage City employees to commute to work using alternative means, including BART and bus passes, ridesharing, van pooling, and secure bicycle storage facilities.
- Program I Complete Streets Best Practices. Develop and apply a complete streets best practices checklist to guide the design and review of proposed transportation improvement projects incorporating appropriate provisions from standard reference guidelines from federal, state and local sources (e.g., Federal Highway Administration, Caltrans, MTC, ABAG, ITE, etc.)

- Program J Citywide Bicycle Plan and Pedestrian Master Plan. Update every seven (7) years the Citywide Bicycle Plan and Pedestrian Master Plan to specify bicycle and pedestrian facility networks, and to identify and prioritize bicycle and pedestrian facility needs in the city.
- **Program N Bicycle and Pedestrian Design Standards.** Prepare updated design standards and upgrades for bicycle and pedestrian facilities consistent with the Bicycle and Pedestrian Master Plan.
- **Program P** Incentivized Reduced Vehicle Trips. Create incentives for existing employers to reduce their vehicle trips.
- Program Q Promote Carpools and Vanpools. Promote the use of carpools and vanpools by supporting and advertising services and programs implemented by 511ContraCosta.org, which operates transportation demand management (TDM) programs and services in the city.
- **Program R Transportation Demand Management System.** Develop a transportation demand management program checklist and seek to fund TDM fee.
- **Program U Bike Route Connectivity.** Develop and sign a network or bicycle routes that provide connectivity between homes, job centers, schools, and other frequently visited destinations.

Goal ENV-7 Meet or exceed State and Federal Air quality standards.

- **Policy ENV-7.3** Fuel-efficient Vehicles. Require fuel efficiency and cleaner fuels for vehicles, including construction and maintenance equipment, by replacing the City vehicles and equipment with zero-emission vehicles and equipment and requesting that City contractors use reduced- or zero-emission fleets.
- **Policy ENV-7.4 Landscape Equipment.** Prohibit the use of gas-powered landscape equipment and publicize the benefits and importance of alternative technologies.
- Goal ENV-8 Become a low carbon community that strives to exceed State GHG reduction goals by 2040.
 - **Policy ENV-8.1** Meet State Emission Reduction Targets. Reduce GHG emissions at a rate that meets the long-term State target to reduce emissions by at least 66 percent below 2005 levels by 2040.
 - **Policy ENV-8.2 Health and Economic Benefits.** Prioritize implementation of GHG reduction projects that provide health and economic benefits for the community.
 - **Policy ENV-8.3** Municipal GHG Reduction. Implement cost-effective GHG reduction strategies for City facilities and operations.
 - **Policy ENV-8.4** Land Use and Transportation Priorities. Support land uses and transportation improvements that prioritize alternative transportation modes that will reduce the number and length of automobile trips.
 - **Policy ENV-8.5 GHG Thresholds.** Require new development projects that would exceed GHG thresholds to feasibly mitigate all GHG emissions and locally offset any remaining GHG emissions that exceed the threshold consistent with the City standards.

- Policy ENV-8.6 Electric Vehicle Infrastructure. Require installation of electric vehicle charging stations as a ratio of total required parking for new and redeveloped commercial and multi-family projects and require new single-family residential development to include 220-volt outlets in all garages.
- **Policy ENV-8.7 Grant Funding.** Seek grant funding to support implementation of GHG reduction projects in municipal facilities, including rebates and other incentive opportunities.
- **Policy ENV-8.8** Preferences for Firms Using Reduced-emissions Equipment. Give preference for City contracts to firms using reduced-emissions equipment, including for services such as trash collection and landscaping.
- **Policy ENV-8.9** Sustainable Community Facility Design. Encourage the incorporation of sustainable design features in community facilities to reduce energy demand and environmental impacts, such as solar reflective roofing, permeable pavement, and incorporation of shade trees.

Goal ENV-9 Improve efficiency and conservation in all development.

- **Policy ENV-9.1** Energy Conservation Education. Partner with utility providers to educate residents, employers, and business owners/managers on the energy conservation programs available.
- **Policy ENV-9.2** Energy Efficiency Improvements. Require energy efficiency improvements, including alternative energy technology, be made as a part of residential and commercial building renovations when a building permit application is submitted to the City.
- **Policy ENV-9.3** Local Partnerships. Partner with local businesses and organizations to secure grants and incentives that facilitate energy efficiency and renewable energy production.
- **Policy ENV-9.4** Municipal Buildings Efficiency and Conservation. Require the design new public buildings to exceed State standards for water and energy efficiency.
- **Policy ENV-9.5 Battery Energy Storage Systems.** Encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.
- **Policy ENV-9.7 Energy-Efficient Lighting**. Require public facilities to use energy-efficient lighting technology for outdoor and indoor spaces.

Environment Element Implementation Programs

- **Program R** Energy Conservation Education. Create a program to educate, provide access to a clearinghouse of available grants, and other funding sources to promote energy conservation and the application of alternative energy technology.
- **Program C Energy Efficiency Public Campaign.** Develop a public outreach campaign on the benefits of energy efficiency and what steps residents and businesses can take to be more energy efficient.

- **Program D Green Retrofit Program.** Seek funding to develop a program that provides financial assistance and informational resources to incentivize homeowners and business owners to retrofit their properties with green infrastructure.
- **Program I** Natural Gas Ban Study. Prepare a study to analyze the implementation of a natural gas ban for all new residential development.
- Goal ENV-10 Become a low or zero-waste community with convenient and effective options for recycling, composting, and diverting waste from landfills.
 - **Policy ENV-10.1** Franchise Agreements. Ensure waste franchise agreements and programs offer progressively higher rates of waste diversion with the goal of attaining and eventually exceeding the mandated 75 percent diversion rate.
 - **Policy ENV-10.3 Zero Waste Education.** Provide simple zero-waste education programs in City facilities and other organizations and partner with schools to facilitate education programs about recycling, composting, and reusing with standardized zero-waste materials.
 - **Policy ENV-10.4 Composting Equipment.** Provide composting equipment at community facilities and events to encourage public and commercial composting.
 - **Policy ENV-10.5** Recycled Building Materials. Encourage new development projects to use recycled building materials where cost-effective and structurally feasible.
 - **Policy ENV-10.6 Building Salvage and Roadway Construction Projects.** Require maximization of building salvage and recycling in remodeling or building demolition or roadway reconstruction projects when issuing demolition and encroachment permits.
 - **Policy ENV-10.7** Recycling and Waste Diversion. Evaluate recycling and waste diversion opportunities periodically to consider new opportunities to further increase waste diversion.
 - **Policy ENV-10.9** Reduction of Non-Recyclable/Compostable Products. Reduce the amount of non-recyclable waste in the community.
 - **Policy ENV-10.10 On-Site Facilities in Existing Development.** Require the City and encourage commercial businesses and business parks to install recycling and compost receptacles on their premises.
 - **Policy ENV-10.11 Reduce Waste in Operations.** Require the City and encourage residents and businesses to reuse products, choose post-consumer recycled content products, reduce packaging waste, and use non-toxic cleaning products to reduce waste and greenhouse gas emissions.

Environment Element Implementation Programs

Program NClean Fleet Program. Research potential funding mechanisms, including grant funding, to prepare and implement a clean fleet program to purchase or lease of zero emission, alternative energy vehicles and equipment with the objective of replacing all fossil fuel vehicles and equipment.

- **Program O** Climate Action Plan. Prepare a Climate Action Plan that addresses all changes in State law pertaining to climate change and emissions, as well as setting GHG threshold targets for the City.
- Program P GHG Reduction and Source Alignment. Pursue a diverse mix of GHG reduction strategies across a range of municipal activities that generate GHG emissions and perform municipal GHG inventories at least once every five years to track results for implementation elsewhere.
- **Program Q Electric Vehicle Parking Regulations.** Revise and update the Zoning Ordinance Parking regulations, as needed, to reflect current best practices for electric vehicle charging considering new state legislation banning combustion engine vehicle by 2035.
- Goal PFS-2 Ensure that adequate wastewater facilities and services are available to meet the needs of existing and future development.
 - **Policy PFS-3.4** Retrofit for Green Infrastructure. Encourage the retrofit of existing development to include sustainable infrastructure and green building practices.
- Goal PFS-4 Continue and improve upon efforts to divert waste from landfills.
 - **Policy PFS-4.1** Sustainable Solid Waste and Recycling Services. Work with contract service provider to advance their sustainability initiatives to increase recovery of key materials and development of regenerative landfills.
 - **Policy PFS-4.3** Recycle and Reuse Building Materials. Require the recycling and reuse of building materials during demolition and construction including roadway projects.
- Goal E-6 Encourage the development and expansion of critical communications and transportation infrastructure.
 - Policy E-6.2 Transportation Systems. Encourage the installation of electric vehicle charging stations, ride sharing hubs, and bike/scooter rental services to support consumer interest in alternative transportation modes. Evaluate the changing needs for parking in commercial and mixed-use districts. Promote expansion of transit services.
 - **Policy E-6.3** Active Transportation. Promote the use of the City's trail systems to increase pedestrian and bike travel, particularly for local work trips. Develop circulation designs in mixed use districts, including Downtown, to promote pedestrian access and bike/scooter travel.

Economics and Economy Element Implementation Programs

Program N Electric Vehicle and Micromobility Charging Stations. Develop a plan for the location and development of publicly available charging stations for autos and other types of personal electric transportation.

The 2040 General Plan is a policy-level document that guides land use and development throughout Pleasant Hill. While the 2040 General Plan would facilitate additional development within City limits, building energy consumption and VMT (and thus air pollution), water consumption, and solid waste generation per capita would be reduced under the 2040 General Plan buildout compared to existing conditions. However, total GHG emissions communitywide would incrementally increase in conjunction with increased overall buildings and VMT. Therefore, 2040 General Plan operational impacts related to generation of GHG emissions would be potentially significant.

CONSISTENCY WITH STATE GHG REDUCTION PLANS

The CARB 2017 Climate Change Scoping Plan outlines a pathway to achieving the 2030 reduction target set under California Senate Bill (SB) 32, which is considered an interim target toward meeting the longer-term 2045 carbon neutrality target set under California Assembly Bill (AB) 1279. In addition, the CARB 2022 Scoping Plan outlines a path to achieving carbon neutrality and reduction of anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 set under AB 1279. Furthermore, 2040 General Plan Implementation Program O in the Environment Element of the 2040 General Plan calls for the preparation of a climate action plan that addresses all changes in State law pertaining to climate change and emissions, as well as setting GHG threshold targets for the City. However, the City does not currently have a climate action plan and has not outlined methods and policies to meet the State2030 and 2045 targets or reduce total GHG emissions communitywide. As such, the 2040 General Plan would not be consistent with the SB 32 GHG reduction target for 2030, the AB 1279 GHG reduction target for 2045, or the 2017 or 2022 California Climate Change Scoping Plans. Therefore, 2040 General Plan operational impacts related to consistency with State GHG reduction plans would be potentially significant.

CONSISTENCY WITH REGIONAL GHG REDUCTION REGULATIONS

As discussed above, the 2040 General Plan would not comply with the 2022 BAAQMD CEQA thresholds for evaluating the significance of climate impacts, which requires an evaluation of whether the plan would meet State goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045 or an evaluation of consistency with a qualified local GHG reduction strategy. While the 2040 General Plan includes Policy ENV 8.1 setting GHG emissions targets, since there is no qualified GHG reduction strategy specific to Pleasant Hill, there is no established mechanism for the City to demonstrate compliance. Furthermore, the targets listed in Policy ENV 8.1 are not currently in line with latest State and BAAQMD targets to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. Therefore, 2040 General Plan operational impacts related to consistency with regional GHG reduction regulations would be potentially significant.

OVERALL

However, implementation of Mitigation Measures GHG-1 and GHG-2 would provide Pleasant Hill with State- and BAAQMD-compliant GHG emissions targets as well as a local Climate Action Plan and CEQA GHG emissions thresholds that, all together, establish a communitywide GHG reduction target and provide an outline of how Pleasant Hill will meet the State targets of 40 percent reduction in GHG emissions below 1990 levels by 2030 and carbon neutrality by 2045 as well as comply with regional BAAQMD CEQA GHG Thresholds. Until a Climate Action Plan is adopted, and CEQA GHG Thresholds are adopted, implementation of the 2040 General Plan would not be consistent with BAAQMD GHG thresholds nor be consistent with State GHG reduction plans.

Therefore, 2040 General Plan impacts related to generation of GHG emissions and consistency with GHG reduction plans and regulations are significant and unavoidable.

Mitigation Measures

MITIGATION MEASURE GHG-1: REVISE GENERAL PLAN POLICY ENV 8.1 TO REFLECT LATEST STATE AND BAAQMD GHG EMISSIONS TARGETS

The City shall revise 2040 General Plan Environment Element Policy ENV 8.1 (Meet State Emission Reduction Targets) to reflect the latest State and BAAQMD GHG emissions targets of 40 percent below 1990 levels by 2030 (pursuant to SB 32) and carbon neutrality by 2045 (pursuant to AB 1279).

MITIGATION MEASURE GHG-2: REVISE GENERAL PLAN PROGRAM O TO INCLUDE DETAILS RELATED TO ADOPTION AND IMPLEMENTATION OF A CLIMATE ACTION PLAN AND CEQA GHG EMISSIONS THRESHOLDS

The City shall add further details to 2040 General Plan Environment Element Program O (Climate Action) that state the following:

The City shall adopt the Pleasant Hill Climate Action Plan by end of 2024 and include targets that reflect those set by SB 32 to reduce GHG emissions by 40 percent below the 1990 levels by 2030 and AB 1279 to achieve carbon neutrality by 2045. Implementation measures in the CAP to achieve the 2030 and 2045 targets shall include, but are not limited to, the following:

- Develop and adopt Zero Net Energy requirements for new and remodeled residential and nonresidential development;
- Develop and adopt a building electrification ordinance for existing and proposed structures;
- Expand charging infrastructure and parking for electric vehicles;
- Implement carbon sequestration by expanding the urban forest, participating in soil-based or compost application sequestration initiatives, supporting regional open space protection, and/or incentivizing rooftop gardens; and
- Implement policies and measures included in the 2017 and 2022 California Climate Change Scoping Plans, such as mobile source strategies for increasing clean transit options and zero emissions vehicles by providing electric vehicle charging stations.

The City shall also adopt Pleasant Hill CEQA GHG Emissions Thresholds of Significance that are consistent with the Pleasant Hill Climate Action Plan by end of 2024 for use in future CEQA GHG emissions analyses through 2030 and consistent with SB 32. In addition, upon completion of future Climate Action Plan updates and as necessary, the City shall update the CEQA GHG emissions threshold of significance to be consistent with each climate action plan update.

Level of Significance

Significant and unavoidable

Energy Consumption

Significance Criterion c: Would the proposed plan result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy

resources, during project construction or operation?

Impact GHG-2 THE 2040 GENERAL PLAN WOULD IMPLEMENT A LAND-USE STRATEGY AND POLICIES THAT WOULD PROMOTE GREATER OVERALL ENERGY EFFICIENCY. WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY WOULD NOT OCCUR. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Development facilitated by the 2040 General Plan would involve the use of energy during construction. Energy use during construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment. Development facilitated by the 2040 General Plan would utilize construction contractors that comply with applicable CARB regulations such as accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment, and restricted idling of heavy-duty diesel motor vehicles. Construction contractors are required to comply with the provisions of CCR Title 13, sections 2449 and 2485, prohibiting diesel-fueled commercial and off-road vehicles from idling for more than five minutes, minimizing unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would minimize inefficient fuel consumption. These construction equipment standards (i.e., Tier 4 efficiency requirements) are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Electrical power would be consumed during demolition and construction activities, and the demand, to the extent required, would be supplied from existing electrical infrastructure in the area.

Overall, demolition and construction activities would not have any adverse impact on available electricity supplies or infrastructure. Demolition and construction activities would utilize fuel-efficient equipment consistent with State and federal regulations and would comply with state measures to reduce the inefficient, wasteful, or unnecessary consumption of energy. Per applicable regulatory requirements of CALGreen, development facilitated by the 2040 General Plan would comply with construction waste management practices to divert construction and demolition debris from landfills. These practices would result in efficient use of energy by construction facilitated by the 2040 General Plan.

Furthermore, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. The 2040 General Plan is a response to economic demand for more housing and commercial, neighborhood business, and mixed-use land uses that, if not fulfilled by the proposed plan, would likely result in new construction elsewhere, with associated increases in commuter VMT. The energy used to construct development facilitated by the 2040 General Plan is necessary, because the 2040 General Plan is intended to meet these demands. Therefore, demolition and construction activities associated with the 2040 General Plan would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and construction energy impacts would be less than significant.

Operation

Development facilitated by the 2040 General Plan would involve the use of energy during operation. Daily operation of the regional transportation system uses energy in the form of fuel consumed by propulsion of passenger vehicles, including automobiles, vans and trucks, and transit vehicles, including buses and trains. In addition, longer-term operation of development facilitated by the 2040 General Plan would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems.

TRANSPORTATION-RELATED ENERGY USE

Increases in motor vehicle trips are primarily a combined function of population and employment growth. The 2040 General Plan emphasizes reducing VMT on area roadways through emphasizing greater residential density, proximity of residents to commercial uses, and the support of alternative methods of transportation. The 2040 General Plan policies that support a VMT reduction, and thus a reduction in energy usage from transportation fuel, include Policies LU-3.2 (Connectivity), LU-3.4 (Clustering Development), LU-4.3 (Neighborhood Connectivity), LU-4.34(Capture Local Spending), LU-4.3 (Vertical and Horizontal Mixed-Use), LU-4.3 (Enhanced Connectivity), LU-6.16 (Walkable Environment), LU-6.25 (Transit-Oriented Development), LU-6.31 (Increased Residential Development), LU-7.2 (Alternative Transportation Improvement), LU-7.3 (Remove Physical Barriers), TC-4.4 (Infill Development), TC-4.5 (Correlation Between Land Use and Transportation), TC-5.1 (Evaluate Multimodal Facility Needs), TC-5.3 (Mobility Technology Support), TC-6.1 (Encourage Non-Driving Forms of Personal Mobility), TC-6.2 (Private Development of Transportation Facilities), TC-6.3 (Non-Vehicular Transportation Requirement), TC-6.4 (Amenities for Non-Driving Modes of Transportation), TC-6.5 (Encourage Development of Alternative Fuel Infrastructure), TC-8.1 (Complete Streets Policies), TC-11.1 (Bicycle and Pedestrian Network), TC-11.3 (Protected Bicycle Facilities), TC-12.6 (Bike Route Connectivity), TC-12.8 (Bicycle Parking), TC-13.1 (Bus and Rail Services), TC-13.2 (Innovative Transportation Technologies), TC-15.1 (TDM Alternatives), TC-15.2 (Require TDM Programs), TC-15.3 (TDM for New Development), TC-15.6 (TDM Measures for Non-Residential Land Uses), ENV-8.4 (Land Use and Transportation Priorities), E-6.2 (Transportation Systems), E-6.3 (Active Transportation), and Program N (Clean Fleet Program) listed with further detail under Impact GHG-1.

Table 3.6-5 shows existing (2022) daily VMT, estimated fuel consumption, and fuel consumption per service population in Pleasant Hill and proposed (2040) conditions with implementation of the 2040 General Plan. As shown therein, daily fuel consumption per service population would be reduced by approximately 16.7 percent under the 2040 General Plan.

Table 3.6-5 Direct Transportation Energy Use in Pleasant Hill

Plan	Year	Service Population	Daily VMT	Daily Fuel Consumption (gallons)	Daily Fuel Consumption Per Service Population (gallons)
2040 General Plan	2022	56,935	1,886,700	92,387	1.62
	2040	107,466	3,018,600	145,513	1.35

Notes: CalEEMod default values for fleet mix and average distance of travel were used for the calculations. Source: See Appendix C for energy calculations.

In addition to the above policies and implementation programs, the 2040 General Plan would encourage infill and transit- and pedestrian- oriented development to reduce overall energy consumption and result in greater energy efficiency throughout the City. For example, the 2040

General Plan contains land-use strategies to encourage higher-density and mixed-use development near transit and along commercial corridors. Mixed-use, transit-oriented, and higher-density development improve energy efficiency as it places City residents closer to places of employment, businesses those residents patronize, and public transit facilities. By placing services and amenities close to where people live and work, the land use scenario envisioned by the 2040 General Plan would minimize the need to drive and reduce per capita energy consumption.

BUILDING-RELATED ENERGY USE

Operation of the development facilitated by the 2040 General Plan would consume natural gas and electricity for building heating and power, lighting, and water conveyance, among other operational requirements. The 2040 General Plan contains goals, policies, and implementation programs that would help minimize the occurrence of inefficient, wasteful, and unnecessary energy consumption during operation of building development facilitated by the General Plan. The 2040 General Plan goals, policies, and implementation programs that would result in reduced building-related energy consumption include the policies listed below as well as Policy ENV-8.9 (Sustainable Community Facility Design), and Program O (Climate Action Plan) as listed in further detail above under Impact GHG-1:

Goal ENV-9 Improve efficiency and conservation in all development.

- **Policy ENV-9.1** Energy Conservation Education. Partner with utility providers to educate residents, employers, and business owners/managers on the energy conservation programs available.
- **Policy ENV-9.2** Energy Efficiency Improvements. Require energy efficiency improvements, including alternative energy technology, be made as a part of residential and commercial building renovations when a building permit application is submitted to the City.
- **Policy ENV-9.3** Local Partnerships. Partner with local businesses and organizations to secure grants and incentives that facilitate energy efficiency and renewable energy production.
- **Policy ENV-9.4 Municipal Buildings Efficiency and Conservation.** Require the design new public buildings to exceed State standards for water and energy efficiency.
- **Policy ENV-9.5 Battery Energy Storage Systems.** Encourage battery energy storage systems as an option for optimizing the management of electricity generated by renewable resources.
- **Policy ENV-9.7 Energy-Efficient Lighting**. Require public facilities to use energy-efficient lighting technology for outdoor and indoor spaces.

Environment Element Implementation Programs

- Program R Energy Conservation Education. Create a program to educate, provide access to a clearinghouse of available grants, and other funding sources to promote energy conservation and the application of alternative energy technology.
- **Program C Energy Efficiency Public Campaign.** Develop a public outreach campaign on the benefits of energy efficiency and what steps residents and businesses can take to be more energy efficient.

Program D Green Retrofit Program. Seek funding to develop a program that provides financial assistance and informational resources to incentivize homeowners

and businessowners to retrofit their properties with green infrastructure.

Program I Natural Gas Ban Study. Prepare a study to analyze the implementation of a natural gas ban for all new residential development.

The 2040 General Plan would reduce energy consumption by providing education about energy conservation programs, requiring energy efficiency improvements, forming partnerships with local businesses to secure grants and incentives to facilitate energy efficiency, require public buildings to exceed water and energy efficiency standards, and encourage battery energy storage systems. By implementing these 2040 General Plan policies and implementation programs, the operation of buildings associated with buildout under the 2040 General Plan would minimize per capita and overall energy consumption.

OVERALL

Implementation of the 2040 General Plan policies and programs listed above, as well as other policies and implementation programs contained in the 2040 General Plan that would result in indirect energy conservation, such as the promotion of alternative transportation, water conservation, and waste reduction, would promote greater transportation and building energy efficiency in municipal and community operations and development. Furthermore, the 2040 General Plan contains a land-use strategy that actively promotes infill mixed-use and transit- and pedestrian-oriented development, which would result in greater transportation energy efficiency overall for Pleasant Hill residents, businesses, and municipal operations. Therefore, operation of the 2040 General Plan would not result in potentially significant environmental effects from wasteful, inefficient, or unnecessary consumption of energy, and operational energy impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Energy Efficiency or Renewable Energy Standards Consistency

Significance Criterion d: Would the proposed plan conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Impact GHG-3 THE 2040 GENERAL PLAN WOULD BE CONSISTENT WITH APPLICABLE ENERGY EFFICIENCY GOALS AND REGULATIONS, INCLUDING RELEVANT PROVISIONS OF CALGREEN AND CALIFORNIA ENERGY CODE TITLE 24. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Policy consistency is limited to operational energy use discussion. No 2040 General Plan construction impact related to consistency with an applicable energy or energy efficiency plan would occur.

Operation

Relevant plans and policies that aim to increase energy efficiency and the production of renewable energy include SB 100, the 2022 California Green Building Standards Code (CALGreen or Title 24 Part 11), and the 2022 California Building Energy Efficiency Standards (Title 24 Part 6). SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program and requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. CALGreen (Title 24 Part 11) institutes mandatory minimum environmental performance standards for all ground-up new non-residential and residential structures and major renovations. In addition, the California Building Energy Efficiency Standards (Title 24 Part 6) establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. CCR Title 24 (Parts 6 and 11) is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New structures and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC.

CONSISTENCY WITH STATE RENEWABLE ENERGY PLANS

Pleasant Hill is part of the MCE community choice aggregate, which provides electricity primarily from clean, renewable sources. Pleasant Hill would continue to reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by MCE continues to increase to comply with SB 100 requirements for electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. The 2040 General Plan includes policies to reduce energy use and increase production of renewable energy, as discussed further below, and would, therefore, align with the overall intent of SB 100 and be consistent with this State renewable energy plan.

CONSISTENCY WITH STATE ENERGY EFFICIENCY PLANS

In addition, the City of Pleasant Hill has adopted State energy conservation plans, including CALGreen (Title 24 Part 11) and the California Building Energy Efficiency Standards (Title 24 Part 6), pursuant to Pleasant Hill Municipal Code Title 14. 33 Therefore, operations associated with infrastructure projects stemming from the 2040 General Plan would be designed to comply with the energy source standards of the CALGreen and the California Building Energy Efficiency Standards. Future projects would be required to demonstrate compliance with the CALGreen and the California Building Energy Efficiency Standards by implementing sustainability and energy efficiency measures such as high-efficiency lighting and HVAC systems, low-flow water fixtures, dual-paned windows, and water efficient landscaping and irrigation systems. Compliance with these regulations would minimize potential conflicts with the aforementioned State energy efficiency plans.

OVERALL

Proposed 2040 General Plan ENV policies seek to decrease non-renewable (i.e., natural gas) consumption and overall energy consumption in new and existing buildings by encouraging the production and storage of local renewable energy as well as requiring energy efficient

³² Major renovations are defined as changes to the building envelop or changing equipment, including different components and entire systems.

³³ Pleasant Hill, City of. 2022. Pleasant Hill Municipal Code Chapter 14.05.

https://www.codepublishing.com/CA/PleasantHill/#!/html/PleasantHill14/PleasantHill1405.html (accessed October 2022).

improvement, incentivizing energy-efficient retrofits, and providing energy conservation education programs. These actions are consistent with the goals and policies established by SB 100, CALGreen, and the California Building Energy Efficiency Standards. As such, the 2040 General Plan would not conflict with adopted renewable energy or energy conservation plans, and impacts related to consistency with State and local renewable energy and energy efficiency plans would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

3.6.5 Cumulative Impacts

GHG emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the GHG emissions from past, present, and future projects and activities have contributed, currently are contributing, and would contribute to global climate change and its associated environmental impacts. And the geographic scope of the cumulative energy analysis is the MCE and PG&E service areas. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3.0, *Environmental Impact Analysis*) located in Pleasant Hill, Concord, Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County in addition to the proposed plan.

GHG Emissions

Cumulative development would generate GHG emissions from vehicle trips, electrical and water use, and other sources. The analysis of GHG emissions is cumulative in nature, as emissions affect the accumulation of GHGs in Earth's atmosphere. Projects that fall below thresholds are considered to have a less than significant impact, both individually and cumulatively. As indicated under Impact GHG-1, the proposed plan would have a significant and unavoidable impact related to GHG emissions and would conflict with GHG reduction plans, because the City of Pleasant Hill does not currently have a climate action plan and has not outlined methods and policies to meet the longterm 2030 reduction targets set by SB 32 and the 2045 carbon neutrality goal set by AB 1279. Implementation of Mitigation Measures GHG-1 and GHG-2 would require the City to update its GHG emissions targets to be consistent with latest State and BAAQMD targets as well as to adopt and implement a climate action plan and CEQA GHG emissions threshold by Summer 2024, which in turn would reduce GHG emissions consistent with State GHG reduction targets set by SB 32 and AB 1279. In addition, until a climate action plan and a CEQA GHG threshold are adopted, implementation of the 2040 General Plan would not be consistent with BAAQMD GHG thresholds. As such, impacts from the 2040 General Plan's GHG emissions would be significant and unavoidable, and the proposed plan would represent a cumulatively considerable impact related to GHG emissions. Therefore, the cumulative impact related to GHG emissions would be significant and unavoidable.

Energy

Cumulative development would increase demand for energy resources. However, new iterations of the California Building Energy Efficiency Standards and CALGreen would require increasingly more energy efficient appliances and building materials that reduce energy consumption in new development. In addition, vehicle fuel efficiency is anticipated to continue improving through implementation of the existing Pavley Bill regulations under AB 1493. Nevertheless, the combined increase in energy consumption from cumulative projects would potentially result in a significant cumulative impact related to the wasteful, inefficient, and unnecessary consumption of energy resources. It is conservatively assumed, therefore, that cumulative development could result in a significant impact related to the wasteful, inefficient, or unnecessary consumption of energy resources. However, as described under Impact GHG-2, 2040 General Plan development would be constructed in accordance with the California Building Energy Efficiency Standards and CALGreen. Policies would emphasize alternative means of transportation, such as bicycles and walking, and would provide development in close proximity to transit stations. Additionally, infill development may lower VMT due to the proximity to offices and commercial uses. Therefore, as the 2040 General Plan would not result in a wasteful, inefficient, or unnecessary consumption of energy, the contribution to a significant cumulative energy impact is not cumulatively considerable.

Plans and projects throughout the State are required to adhere to applicable renewable energy and energy efficiency laws, programs, and policies such as California's RPS, AB 1493, and Title 24 standards. Therefore, the cumulative impact related to consistency with renewable energy and energy reduction plans would be less than significant. As discussed under Impact GHG-3, 2040 General Plan development would be consistent with the energy-related goals and policies of the Statewide plans and regulations. Therefore, the 2040 General Plan would not contribute to a cumulative impact with respect to consistency with renewable energy and energy efficiency plans.

The overall cumulative impact related to energy would be less than significant.

Overall Level of Cumulative Significance

Significant and unavoidable

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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3.7 Hazards, Hazardous Materials, and Wildfire

3.7.1 Introduction

This section describes the existing hazards, hazardous materials, and wildfire conditions in the General Plan area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to hazards, hazardous materials, and wildfire that could result from implementation of the proposed plan. Information in this section is based on information available on the California Department of Toxic Substances (DTSC), the State Water Resources Control Board (SWRCB), the California Environmental Protection Agency (CalEPA), California Department of Forestry and Fire Protection, and the City of Pleasant Hill websites.

3.7.2 Environmental Setting

Fundamentals

Hazards

This description of existing conditions focuses on hazards from fire and overhead power lines, as well as hazardous materials and wastes. A hazard is a situation that poses a level of threat to life, health, property, or the environment. Hazards can be dormant or potential, with only a theoretical risk of harm. However, once a hazard becomes active, it can create an emergency. A hazardous situation that has already occurred is called an incident. Emergency response is action taken in response to an unexpected and dangerous occurrence in an attempt to mitigate its impact on people, structures, or the environment. Emergency situations can range from natural disasters to hazardous-materials problems and transportation incidents.

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when handled, disposed, or otherwise managed improperly. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic—causes human health effects
- Ignitable—has the ability to burn
- Corrosive—causes severe burns or damage to materials
- Reactive—causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

HAZARDOUS BUILDING MATERIALS

Many older buildings contain building materials that consist of hazardous materials. These materials include lead-based paint, asbestos-containing material, and polychlorinated biphenyls (PCBs).

Prior to the United States Environmental Protection Agency (USEPA) ban in 1978, lead-based paint was commonly used on interior and exterior surfaces of buildings. Disturbances such as sanding and scraping activities, renovation work, gradual wear and tear, old peeling paint, and paint dust particulates have been found to contaminate surface soils or cause lead dust to migrate and affect indoor air quality. Exposure to residual lead can cause severe health effects, especially in children.

Asbestos is a naturally occurring fibrous material that was extensively used as a fireproofing and insulating agent in building construction materials before such uses were banned by the USEPA in the 1970s due to harmful health effects. In addition, many types of electrical equipment contained PCBs as an insulator, including transformers and capacitors. After PCBs were determined to be a carcinogen in the mid to late 1970s, the USEPA banned PCB use in new equipment and began a program to phase out certain existing PCB-containing equipment. For example, fluorescent lighting ballasts manufactured after January 1, 1978, do not contain PCBs and are required to have a label clearly stating that PCBs are not present in the unit.

HAZARDOUS SUBSTANCES

A hazardous substance can be any biological, natural, or chemical substance, whether solid, liquid, or gas, that may cause harm to human health. Hazardous substances are classified on the basis of their potential health effects, whether acute (immediate) or chronic (long-term). Dangerous goods are classified on the basis of immediate physical or chemical effects, such as fire, explosion, corrosion, and poisoning. An accident involving dangerous goods could seriously harm human health or damage property or the environment. Harm to human health may happen suddenly (acute), such as dizziness, nausea, and itchy eyes or skin; or it may happen gradually over years (chronic), such as dermatitis or cancer. Some people can be more susceptible than others. Hazardous substances and dangerous goods can include antiseptic used for a cut, paint for walls, a cleaning product for the bathroom, chlorine in a pool, carbon monoxide from a motor vehicle, fumes from welding, vapors from adhesives, or dust from cement, stone, or rubber operations. Such hazardous substances can make humans very sick if they are not used properly.

HAZARDOUS WASTES

Hazardous waste is any hazardous material that is to be discarded, abandoned, or recycled. The criteria that define a material as hazardous also define a waste as hazardous. Specifically, materials and waste may be considered hazardous if they are poisonous (toxic); can be ignited by open flame (ignitable); corrode other materials (corrosive); or react violently, explode, or generate vapors when mixed with water (reactive). Soil or groundwater contaminated with hazardous materials above specified regulatory state or federal thresholds is considered hazardous waste if it is removed from a site for disposal. If handled, disposed, or otherwise handled improperly, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous Materials Listing

The Cortese List is a list of known hazardous materials, including hazardous waste facilities, that meet one or more of the provisions of Government Code Section 65962.5, including:

- The list of hazardous waste and substances sites from the California DTSC EnviroStor database.¹
- The list of leaking underground storage tank (LUST) sites by county and fiscal year from the SWRCB GeoTracker database.²
- The list of solid waste disposal sites identified by the SWRCB with waste constituents exceeding hazardous waste levels outside the waste management unit.³
- The list of active cease-and-desist orders and cleanup and abatement orders from SWRCB.⁴
- The list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, as identified by DTSC.⁵

Presence of Hazardous Materials

General Plan Area (Pleasant Hill)

According to databases of hazardous material sites maintained by California DTSC EnviroStor and SWRCB GeoTracker, Pleasant Hill (the General Plan area) has the following types of hazardous sites that are open, active, or need further investigation: underground storage tanks (USTs), cleanup program sites, voluntary cleanup, or evaluation. A list of open hazardous material sites within the General Plan area is shown in Table 3.7-1, and the sites are also shown on Figure 3.7-1. In addition, Interstate 680, which traverses through Pleasant Hill, is designated by the National Hazardous Materials Route Registry as a Class A (All Non-radioactive Hazardous Materials) route as well as a Class B (Class 1 Explosives) route.

¹ California DTSC. "Cortese" list of DTSC EnviroStor database list of Hazardous Waste and Substances sites. DTSC Hazardous Waste and Substances Site List—Site Cleanup (Cortese List). Available: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

² SWRCB. "Cortese" List of Leaking Underground Storage Tank Sites by County (San Francisco County). Available: https://geotracker.waterboards.ca.gov/sites_by_county.

³ CalEPA. "Cortese" list of solid waste disposal sites identified with waste constituents above hazardous waste levels outside the waste management unit. Available: http://www.calepa.ca.gov/files/2016/10/SiteCleanup-CorteseList-CurrentList.pdf.

⁴ CalEPA. "Cortese" list of State Water Board sites with active Cease and Desist Orders or Cleanup Abatement Orders. Available:http://www.calepa.ca.gov/files/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx.

⁵ CalEPA. "Cortese" list of sites subject to Corrective Action pursuant to Health and Safety Code 25187.5. Available: https://www.calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.

⁶ California DTSC. 2022. EnviroStor. Available:https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=pleasant+hill%2C+CA (accessed November 2022).

⁷ SWRCB. 2022. GeoTracker. Available:https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=pleasant+hill%2C+CA (accessed November 2022).

⁸ Federal Motor Carrier Safety Administration. 2019. National Hazardous Materials Route Registry – By State. Available: https://www.fmcsa.dot.gov/regulations/hazardous-materials/national-hazardous-materials-route-registry-state (accessed June 2022)

Table 3.7-1 Hazardous Material Sites within General Plan Area

Site Address	Site Name	Status
1705 Contra Costa Blvd	Chevron	Open – Site Assessment
1859 Contra Costa Blvd	Former ARCO Service Station	Open – Assessment & Interim Remedial Action
1705 Contra Costa Blvd	Former Dry Cleaner and Existing Chevron Service Station	Open – Site Assessment
1946 Contra Costa Blvd	Former Dutch Girl Cleaners	Open – Inactive
1521 – 1529 Contra Costa Blvd	Former Phillips Petroleum Gas Station	Open – Eligible for Closure
228 Hookston Road	Hookston Station	Open – Remediation – Land Use Restriction
3301-3341 Vincent Road	Mayhew Center Facility – Mayhew Center	Open – Assessment & Interim Remedial Action
3313 – 3329 Vincent Road	Mayhew Center Facility – Mayhew Center Building 2 Operable Unit	Open – Remediation
1643 Contra Costa Blvd	P & K Cleaners	Open – Site Assessment
220 Hookston Road	Pitcock Petroleum Company	Open - Remediation

Notes: Active Sites are sites at which site assessment, removal, remedial enforcement, cost recovery, or oversight activities are being planned or conducted under a hazardous materials program. Open Sites are sites at which hazardous materials activities have already been conducted

Proximity to Schools

School locations require consideration, because children are particularly sensitive to hazardous materials exposure. Pleasant Hill also includes sensitive land uses such as hotels and motels; group homes, churches; other learning institutions; and libraries.

General Plan Area (Pleasant Hill)

Mt. Diablo Unified School District (MDUSD) provides public education services to Pleasant Hill (the General Plan area). MDUSD operates 31 elementary schools, nine middle schools, five high schools, and two adult education centers, which serve more than 31,000 students across the Cities of Pleasant Hill, Clayton, and Concord; portions of the Cities of Martinez, Pittsburg, and Walnut Creek, and several unincorporated communities. The General Plan area is served by six public elementary schools, three public middle schools, and one public high schools. The General Plan area is served by six public elementary schools, three public middle schools, and one public high schools.

There are no open hazardous materials sites located within 0.25-mile of a school within the General Plan area as shown in Figure 3.7-2.

⁹ Pleasant Hill, City of. 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook. https://pleasanthill2040.com/documents.html (accessed September 2022).

¹⁰ Mt. Diablo Unified School District (MDUSD). 2022. School Site Locator.

https://portal.schoolsitelocator.com/apps/ssl/?districtcode=10020 (accessed September 2022).

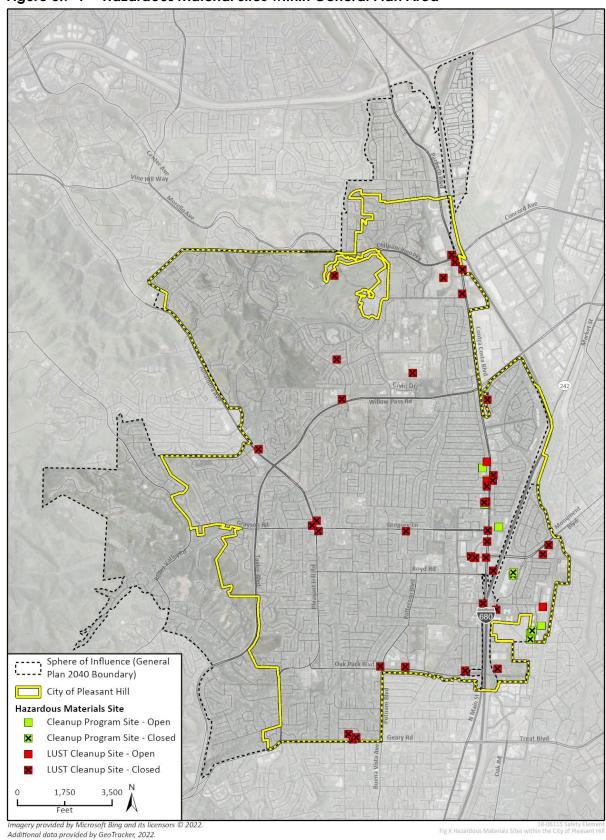


Figure 3.7-1 Hazardous Material Sites within General Plan Area

Hidden Valley Elementary College Park High School Valhalla Elementary Valley View Middle School Gregory Gardens Elementary Strandwood Pleasant Hill Middle School Elementary ---- Sphere of Influence (General '---- Plan 2040 Boundary) City of Pleasant Hill 0.25-Mile Radius of a School **Hazardous Materials Sites** Name Cleanup Program Site - Open Cleanup Program Site - Closed LUST Cleanup Site - Open LUST Cleanup Site - Closed 3,500 Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provided by GeoTracker, 2022.

Fig X Hazardous Materials Sites within 0.25-mile of a School

Figure 3.7-2 Hazardous Material Sites within 0.25-mile of a School

Wildfire Hazard Area Designations

Classifications and Zones

In California, responsibility for wildfire prevention and suppression is shared by federal, State, and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas (FRA). The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of Statewide interest and have classified those lands as State Responsibility Areas (SRA), which are managed by CAL FIRE.¹¹ All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas (LRA).

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (Public Resources Code Sections 4201-4204 and California Government Code Sections 51175-89). As described above, the primary factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE maps fire hazards based on zones, referred to as FHSZs. CAL FIRE maps three zones in SRA: 1) Moderate FHSZs; 2) High FHSZs; and 3) Very High FHSZs (VHFHSZs). Only the VHFHSZs are mapped in LRA. Each of the zones influence how people construct buildings and protect property to reduce risk associated with wildfires.

Contra Costa County

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone Map, much of Contra Costa County is located in a Moderate, High, and Very High Fire Hazard Zone due to the mountainous terrain and natural vegetation. In general, the majority of these areas are designated High Fire Hazard Severity Zones with areas of significant elevation change, such as Mount Diablo State Park and Briones Regional Park. Prevailing winds in the County tend to travel in a south to southwest direction. ¹²

General Plan Area (Pleasant Hill)

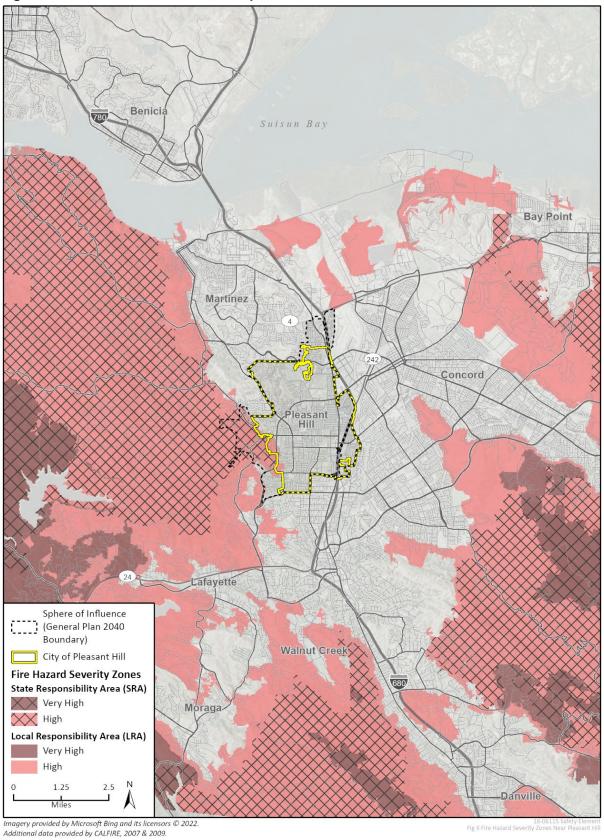
Pleasant Hill (General Plan area) proximity to Briones Regional Park and other open, undeveloped land poses a threat of wildland fires spreading near and into the sphere of influence where the park and open space abuts urban development to the southwest (shown in Figure 3.7-3). Minor brush fires in the area are common during the fire season but previously have been extinguished before developed areas sustain much damage. The southwestern portion of the City Limits is designated as a High Fire Hazard Severity Zones within a Local Responsibility Area. The western and southwestern portions of the Pleasant Hill Sphere of Influence (but outside of City Limits) are designated as being High Fire Hazard Severity Zones within a State Responsibility Area.

¹¹ United States Department of the Interior, US Department of Agriculture, and CAL FIRE. 2018. 2018-2023 California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement.

https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprdb5350828.pdf (accessed April 2022).

¹²Bay Area Air Quality Management District (BAAQMD). Air Monitoring Data. http://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data?DataViewFormat=yearly&DataView=met&StartDate=2/19/2019&ParameterId=204. (accessed November 2022)

Figure 3.7-3 Wildfire Hazard Severity Zones near Pleasant Hill



Wildfire-conducive Conditions

Because of substantial open space areas and associated vegetation and wildlife habitats throughout the State, California is subject to fire hazards. Grassland or other vegetation in California is easily ignited, particularly in dry seasons. Wildfire is a serious hazard in high dry fuel load areas, particularly near areas of natural vegetation and steep slopes, since fires tend to burn more rapidly on steeper terrain. Wildfire is also a serious hazard in areas of high wind, given that fires will travel faster and farther geographically when winds are higher. Furthermore, wildfire is more likely in areas where electric power lines are located above ground and could ignite vegetation where it comes into contact. Wildfire could also spread in areas of fuel lines, which could fail (whether due to earthquake or error) and ignite a fire. Extreme wildfire events are expected to increase in frequency with the effects of increased global temperature, although changes in specific fire-prone areas are difficult to predict with any certainty.¹³

The Governor's Office of Planning and Research (OPR) has recognized that although high-density structure-to-structure loss can occur, structures in areas with low- to intermediate-density housing were most likely to burn, potentially due to intermingling with wildland vegetation or difficulty of firefighter access. In general, increasing density decreases risk of wildfire. The risk of loss of human life, property, natural resources, or economic assets from wildfire is highest at the Wildland-Urban Interface (WUI), areas of urban development located adjacent to or even within wildland areas. Today approximately one-third of houses in California are within the WUI area. ¹⁴ It is important to note that there are varying definitions of what constitutes a WUI, and some local or regional agencies consider some areas to be WUI that are not defined as Wildland Interface or Intermix zones under the Wildland-Urban Interface Building Standards in Title 24, Part 2 of the California Code of Regulations (CCR); these standards are discussed under *Regulatory Setting* below.

In addition to stripping the land of vegetation and destroying forest resources, large, intense fires can harm the soil, waterways, and the land itself. Soil exposed to intense heat may lose its capability to absorb moisture and support life. Exposed soils erode quickly and enhance siltation of rivers and streams, thereby enhancing flood potential, harming aquatic life, and degrading water quality. Lands stripped of vegetation are also subject to increased debris flow hazards. Slope instability from wildfire scarring of the landscape can result in slope instability in the form of more intensive flooding and landslides. Such post-fire slope soils and altered drainage patterns can result in soil creep on downslope sides of foundations and reduce lateral support.

Vegetation

CONTEXT

Vegetation is fuel to a wildfire, and it changes over time with seasonal growth and die-back. The relationship between vegetation and wildfire is complex, but generally some vegetation is naturally fire resistant, while other vegetation is extremely flammable. Some plant types in California landscapes are fire resistant, while others are fire-dependent for their seed germination cycles.

Wildfire behavior depends on the type of fuels present, such as ladder fuels, surface fuels, and aerial fuels. Surface fuels include grasses, logs, and stumps low to the ground. Ladder fuels, such as tall shrubs, young trees, and the lowest branches of mature trees, provide a path for fire to climb upward into the crowns of trees. Aerial fuels include upper limbs, foliage, and branches not in

¹³ United States Forest Service (USFS). 2022. Wildland Fire. https://www.fs.usda.gov/ccrc/topics/wildfire (accessed April 2022)

¹⁴ California Governor's Office of Planning and Research (OPR) 2020. Fire Hazard Planning Technical Advisory https://opr.ca.gov/docs/20201109-Draft_Wildfire_TA.pdf (accessed April 2022)

contact with the ground. Ample spacing in between tree crowns and trimming of lower branches close to the ground is effective at preventing fire from either igniting the crown of a tree or spreading from an ignited tree to adjacent trees; conversely, closely packed trees with low branches are especially susceptible to crown ignition and spread. ¹⁵ Weather and climate conditions, including drought cycles, can lead to dry vegetation with low moisture content, increasing its flammability.

Changes in precipitation patterns and increased temperatures associated with climate change will alter the distribution and character of natural vegetation and associated moisture content of plants and soils. An increase in frequency of extreme heat events and drought are also expected. These changes will lead to increased frequency and intensity of large wildfires.

CONTRA COSTA COUNTY

Land uses in Contra Costa County range from rural, agricultural, and open space; to urban and developed. According to the CAL FIRE Fire Hazard Severity Zone Map, much of Contra Costa County is located in a Moderate, High, and Very High Fire Hazard Zone due to the mountainous terrain and natural vegetation. In particular, areas near open space areas such as, Mount Diablo State Park, Briones Regional Park, and Tilden Regional Park, which are dominated by chaparral and grassland vegetation, are located in High and Very High fire hazard zones.

GENERAL PLAN AREA (PLEASANT HILL)

Pleasant Hill (the General Plan area) is located in a mostly urbanized, flat area and does not contain any CAL FIRE-designated "Very High" fire hazard zones. However, the western portion of the General Plan area is located within a CAL FIRE designated "High" fire hazard zone. The portion of the "High" fire hazard zone located within City limits is designated as a local responsibility area. The portion of the "High" fire hazard zone located outside of City Limits but within the Sphere of Influence is located within a State responsibility area.

Slope and Aspect

CONTEXT

According to CAL FIRE, sloping land increases susceptibility to wildfire because fire typically burns faster up steep slopes, and they may hinder firefighting efforts. ¹⁶ Following severe wildfires, sloping land is also more susceptible to landslide or flooding from increased runoff during substantial precipitation events. Aspect is the direction that a slope faces, and it determines how much radiated heat the slope will receive from the sun. Slopes facing south to southwest will receive the most solar radiation and are warmer and drier than slopes facing a northerly to northeasterly direction, increasing the potential for wildfire ignition and spread. ¹⁷

CONTRA COSTA COUNTY

Slope instability from wildfire scarring of the landscape can result in slope instability in the form of more intensive flooding and landslides. These post-fire slope soils and altered drainage patterns can result in soil creep on downslope sides of foundations and reduce lateral support. The major post-

¹⁵ CAL FIRE. 2022. Fire and Fuels Treatment. https://www.fire.ca.gov/programs/resource-management/resource-protection-improvement/landowner-assistance/forest-stewardship/fire-and-fuels-treatment/ (accessed November 2022).

¹⁶ CAL FIRE. 2007b. Fact Sheet: California's Fire Hazard Severity Zones. May 2007.

https://www.sccgov.org/sites/dpd/DocsForms/Documents/Fire_Hazard_Zone_Fact_Sheet.pdf (accessed April 2022).

¹⁷ University of California. 2018. Field Operations Manual. Revised November 2018. https://www.ucop.edu/safety-and-loss-prevention/_files/field-research-safety/wildland-fire-safety.pdf (accessed April 2022).

wildfire hazards in Contra Costa County are unstable hill slopes and altered drainage patterns. Slopes may suffer landslides, slumping, soil slips, and rockslides. The Contra Costa County General Plan has recognized that major slope areas in excess of 26 percent are "not readily developable" and "undevelopable," recognizing the cost and engineering difficulties of grading steep slopes as well as their inherent unsuitability. ¹⁸ Figure 10-6 of the Contra Costa County General Plan shows Landslide Hazards in Contra Costa County. The most recent fire in Contra Costa County is the Alhambra Fire (2019, off SR-4 and Alhambra Avenue in the City of Martinez), located approximately six miles to the northwest.

GENERAL PLAN AREA (PLEASANT HILL)

The City's Sphere of Influence is located within a State-designated earthquake-induced landslide hazard zone as shown in Section 3.5, *Geology, Soils, and Mineral Resources*. Pleasant Hill (city limits) is not located within a State-designated earthquake-induced landslide hazard zone. However, the Association of Bay Area Governments Resilience Program has identified past landslides throughout the western portion of the General Plan area.¹⁹

Weather and Atmospheric Conditions

Wind, temperature, and relative humidity are the most influential weather elements in fire behavior and susceptibility. ²⁰ Fire moves faster under hot, dry, and windy conditions. Wind may also blow embers ahead of a fire, causing its spread. Drought conditions lead to extended periods of excessively dry vegetation, increasing the fuel load and ignition potential.

According to data collected by the California Energy Commission, most precipitation is received from October through April, with an average annual rainfall of 26.4 inches. ²¹ May through September is the driest time of the year and coincides with what has traditionally been considered the fire season in California. However, increasingly persistent drought and climatic changes in California have resulted in drier winters, and fires during the autumn, winter, and spring months are becoming more common.

CONTRA COSTA COUNTY

Prevailing winds in the County tend to travel in a northwest to southwest direction. ²² The average wind speed in the City of Concord and near the City of Pleasant Hill ranges from 14 to 17 mph and blows southwest. ²³ Natural gas pipelines occur frequently across Contra Costa County, including residential and commercial areas. Natural gas poses a lower risk of causing a fire than petroleum products, because it is transported at lower pressures and, when released, rises and dissipates into the atmosphere. ²⁴

¹⁸Contra Costa County General Plan, page 10-22.

¹⁹ Association of Bay Area Governments (ABAG). 2021. MTC/ABAG Hazard Viewer Map [map].

https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed December 2022).

²⁰ CAL FIRE. 2022. Fire and Fuels Treatment. https://www.fire.ca.gov/programs/resource-management/resource-protection-improvement/landowner-assistance/forest-stewardship/fire-and-fuels-treatment/ (accessed April 2022).

²¹ California Energy Commission. 2022. Cal-Adapt [tool]. https://cal-adapt.org/tools/annual-averages (accessed April 2022).

²²Bay Area Air Quality Management District (BAAQMD). Air Monitoring Data. http://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data?DataViewFormat=yearly&DataView=met&StartDate=2/19/2019&ParameterId=204.(accessed November 2022))

²³ BAAQMD. Air Monitoring Data. Available: http://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data?DataViewFormat=yearly&DataView=met&StartDate=2/19/2019&ParameterId=204. (accessed November 2022)

²⁴ Contra Costa County. Contra Costa County General Plan, Safety Element, page 10-37.

GENERAL PLAN AREA

In general, the average wind speed in Contra Costa County ranges from 14 to 17 miles per hour (mph) and blows southwest. ²⁵ Electric power lines mostly occur in urban areas and along roadways. There are two fuel pipelines that traverse the General Plan area: one beneath Taylor Boulevard and one beneath the Iron Horse Trail. ²⁶ Electrical lines within the General Plan area typically exist above ground, along streets and roadways. The nearest CAL FIRE-designated high-risk fire hazard zone abuts the southwestern portion of the General Plan area. ²⁷

The closest Bay Area Air Quality Management District (BAAQMD) air data monitoring station is located in the City of Concord, approximately 3.1 miles to the northeast.

Fuel and Energy Lines

Electric power lines mostly occur in urban areas and along roadways. Electric power, natural gas, and petroleum lines pose a risk of causing fire in the event of failure (whether due to earthquake or error). Natural gas poses a lower risk of causing a fire than petroleum products, because it is transported at lower pressures and, when released, rises and dissipates into the atmosphere.²⁸

CONTRA COSTA COUNTY

Natural gas and petroleum pipelines occur across Contra Costa County, including residential and commercial areas.

GENERAL PLAN AREA (PLEASANT HILL)

There are natural gas pipelines that traverse Pleasant Hill (the General Plan area) underneath Contra Costa Boulevard and I-680 in the eastern portion of the General Plan area.²⁹

Emergency and Evacuation Routes/Access

Contra Costa County

The Contra Costa County Office of the Sheriff: Emergency Services Division is responsible for planning, outreach, and training or disaster management and emergency preparedness throughout the County. The Contra Costa County General Plan establishes a 5-minute response time standard for responding to fire protection calls for service. Within Contra Costa County, the main routes into and out of the County that would be most likely used as evacuation routes are Interstate 80 (I-80), I-680, and I-580, as well as State Route 4 (SR-4) and SR-24.

²⁵ BAAQMD. Air Monitoring Data. Available: http://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data?DataViewFormat=yearly&DataView=met&StartDate=2/19/2019&ParameterId=204.(accessed November 2022)

²⁶ Pleasant Hill, City of. 2003. Pleasant Hill 2003 General Plan, page 64.

²⁷ California Department of Forestry and Fire Protection. 2007. Fire Hazard Severity Zones in SRA: Contra Costa County [map]. Available: https://osfm.fire.ca.gov/media/6662/fhszs_map7.pdf (accessed November 2022).

²⁸ United States Department of Energy. 2022. Alternative Fuels Data Center. Available: https://afdc.energy.gov/vehicles/natural gas safety.html (accessed November 2022).

²⁹ National Pipeline Mapping System. 2022. NPMS Public Viewer. Available: https://pvnpms.phmsa.dot.gov/PublicViewer/ (accessed November 2022).

³⁰ Contra Costa County Office of the Sheriff. 2022. Available: https://www.cocosheriff.org/bureaus/support-services/emergency-services-support-unit-volunteers (accessed November 2022)

General Plan Area (Pleasant Hill)

The Pleasant Hill Police Department is responsible for planning, outreach, and training or disaster management and emergency preparedness for Pleasant Hill (the General Plan area). The main routes into and out of the General Plan area that would be most likely used as evacuation routes are I-680, Oak Park Boulevard, Taylor Boulevard, and Alhambra Avenue.

Airport Safety Zone Proximity

General Plan Area (Pleasant Hill)

The Buchanan Field Airport is located just outside the northeast corner of the Pleasant Hill city limits, with flightpaths from the Buchanan Field Airport southwestern to northeastern runways located over Pleasant Hill. The northeastern portion of the General Plan area is within Buchanan Field Airport's Airport Influence Area and located within Safety Zones 3 and 4, as shown on Figures 3A and 3C of the ALUCP.³¹

Safety Zones 3 and 4 regulations include the following:

Safety Zone 3

- (a) Land uses shall be limited to a maximum of 125 people per acre.
- (b) Buildings shall have no more than three habitable floors above ground.
- (c) Residences, children's schools (through grade 12), hospitals, and nursing homes are specifically prohibited.
- (d) Aboveground storage of more than 2,000 gallons of fuel or hazardous materials is prohibited.

Safety Zone 4

- (a) Land use intensity is not limited other than that buildings shall have no more than four habitable floors above ground.
- (b) Aboveground storage of more than 2,000 gallons of fuel or other hazardous materials is prohibited in existing or planned residential or commercial areas. ³²

3.7.3 Regulatory Framework

Federal Regulations

Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act

The USEPA is responsible for implementing and enforcing federal laws and regulations pertaining to hazardous materials. The primary legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) and the Emergency Planning and Community Right-to-Know Act (known as SARA Title III). RCRA and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-

 ³¹ CCCALUC. 2000. Contra Costa County Airport Land Use Compatibility Plan. Adopted December 2000. Available:
 https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies. (accessed November 2022)
 32 Contra Costa County. 2000. Contra Costa County Airport Land Use Compatibility Plan: Buchanan Field Airport Policies. December 13,2000. Available: <a href="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies?bidId="https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies.bidId="https://www.contracost

hazardous wastes and mandate that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment, including detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. As permitted by RCRA, in 1992, the USEPA approved California's program called the Hazardous Waste Control Law (HWCL), administered by the DTSC, to regulate hazardous wastes in California, as discussed further below. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat, and the Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities. SARA relates primarily to emergency management of accidental releases and requires annual reporting of continuous emissions and accidental releases of specified compounds that are compiled into a nationwide Toxics Release Inventory. Finally, SARA Title III requires formation of state and local emergency planning committees that are responsible for collecting material handling and transportation data for use as a basis for planning and provision of chemical inventory data to the community at large under the "right-to-know" provision of the law.

Hazardous Materials Transportation Act

Under the Hazardous Materials Transportation Act of 1975, the United States Department of Transportation (DOT), Office of Hazardous Materials Safety regulates the transportation of hazardous materials on water, rail, highways, through air, or in pipelines, and enforces guidelines created to protect human health and the environment and reduce potential impacts by creating hazardous-material packaging and transportation requirements. It also includes provisions for material classification, packaging, marking, labeling, placecarding, and shipping documentation. The DOT provides hazardous-materials safety training programs and supervises activities involving hazardous materials. In addition, DOT develops and recommends regulations governing the multimodal transportation of hazardous materials.

Aboveground Petroleum Storage Act, and Spill Prevention, Control, and Countermeasure Rule

The Aboveground Petroleum Storage Act of 1990, and the Spill Prevention, Control, and Countermeasure (SPCC) Rule (amended 2010) of the Oil Pollution Prevention regulation (40 Code of Federal Regulations [CFR] 112) require the owner or operator of a tank facility with an aggregate storage capacity greater than 1,320 gallons to notify the local Certified Unified Program Agency (CUPA) and prepare an SPCC plan. The SPCC plan must identify appropriate spill containment measures and equipment for diverting spills from sensitive areas, and must discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and training.

Clean Water Act

The Clean Water Act (CWA) (Title 33 § 1251 et seq. of the United States Code [33 USC 1251, et seq.]) is the major federal legislation governing water quality. The CWA established the basic structure for regulating discharges of pollutants into waters of the United States. The objective of the act is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States. Responsibility for administering the CWA resides with SWRCB and the nine respective RWQCBs; the San Francisco Bay RWQCB administers the CWA in the Pleasant Hill area.

Section 404 of the CWA regulates temporary and permanent fill and disturbance of waters of the United States, including wetlands. The United States Army Corps of Engineers requires that a permit

be obtained if a project proposes to place fill in navigable waters and/or to alter waters of the United States below the ordinary high-water mark in nontidal waters. Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Compliance with the water quality standards required under Section 401 is a condition for issuance of a Section 404 permit. Under Section 401 of the CWA, every applicant for a permit or license for any activity that may result in a discharge to a water body must obtain a State water quality certification from the RWQCB to demonstrate that the proposed activity would comply with State water quality standards.

Federal Insecticide, Fungicide, and Rodenticide Act

This Act (7 U.S. Code [USC] 136 et seq.) provides Federal control of pesticide distribution, sale, and use. The USEPA was given authority under the Act to study the consequences of pesticide usage, and to require users (farmers, utility companies, and others) to register when purchasing pesticides. Later amendments to the law required users to take exams for certification as applicators of pesticides. All pesticides used in the United States must be registered (licensed) by the USEPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to the environment.

Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations

Governed by the U.S. Housing and Urban Development, regulations for LBP are contained in the Lead-Based Paint Elimination Final Rule 24 Code of Federal Regulations (CFR) 33, which requires sellers and lessors to disclose known LBP and LBP hazards to perspective purchasers and lessees. Additionally, all LBP abatement activities must follow California and federal occupational safety and health administrations (California Occupational Safety and Health Administration [CalOSHA] and federal Occupational Safety and Health Administration [OSHA], respectively) and with the State of California Department of Health Services requirements. Only LBP trained and certified abatement personnel can perform abatement activities. All lead LBP removed from structures must be hauled and disposed of by a transportation company licensed to transport this type of material at a landfill or receiving facility licensed to accept the waste.

Federal Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires a State-level mitigation plan as a condition of disaster assistance and provides funding to communities developing their own mitigation plans through the Pre-Disaster Mitigation Grant Program. There are two different levels of State disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act also established new requirements for local mitigation plans.

National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

State Regulations

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is the primary hazardous waste statute in the State of California, and implements RCRA as a "cradle-to-grave" waste management system in the State of California for handling hazardous wastes in a manner that protects human health and the environment and would reduce potential resulting impacts. The law specifies that generators have the primary duty to determine whether their waste is hazardous and to ensure proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous waste used or reused as raw materials. The law exceeds federal requirements by mandating source reduction planning, and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of waste and waste management activities that are not covered by federal law.

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which is implemented by regulations described in California Code of Regulations (CCR) Title 26. The State program is similar to, but more stringent than, the federal program under RCRA. The regulations list materials that may be hazardous, and establish criteria for their identification, packaging, and disposal. Environmental health standards for management of hazardous waste are contained in CCR Title 22, Division 4.5. As required by California Government Code Section 65962.5, DTSC maintains a Hazardous Waste and Substances Site List for the State called the Cortese List.

If any soil is excavated from a site containing hazardous materials, it would be considered a hazardous waste if it exceeded specific criteria in Title 22 of the California Code of Regulations. Remediation of hazardous wastes found at a site may be required if excavation of these materials is performed, or if certain other soil disturbing activities would occur. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking jurisdiction.

California Health and Safety Code

The California Health and Safety Code (HSC § 25141) defines hazardous waste as a waste or combination of waste that may:

- ... because of its quantity, concentration, or physical, chemical, or infection characteristics:
- (1) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation-reversible illness.
- (2) Pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of or otherwise managed.

This statutory framework establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management practices for hazardous wastes; establishes permit requirements

for hazardous-waste treatment, storage, disposal, and transportation; and identifies hazardous waste that commonly would be disposed of in landfills.

Under both the RCRA and HWCL, hazardous-waste manifests must be retained by the generator for a minimum of 3 years. The generator must match copies of the manifests with copies of manifest receipts from the treatment, disposal, or recycling facility.

In accordance with Chapter 6.11 of the California Health and Safety Code (HSC § 25404, et seq.), local regulatory agencies enforce many federal and State regulatory programs through the Certified Unified Program Agencies program, including:

- Hazardous Materials Business Plans (HMBPs) (HSC § 25501, et seq.);
- State Uniform Fire Code (UFC) requirements (UFC § 80.103, as adopted by the State Fire Marshal pursuant to HSC § 13143.9);
- Underground Storage Tanks (USTs) (HSC § 25280, et seq.);
- Aboveground storage tanks (HSC § 25270.5[c]); and
- Hazardous-waste-generator requirements (HSC § 25100, et seq.).

Contra Costa Health Services is the CUPA for Contra Costa County and enforces State statutes and regulations through the Hazardous Materials Unified Program Agency (HMUPA). The HMUPA oversees aboveground petroleum tanks; generation of hazardous materials; storage and treatment; USTs; generation of medical waste; the accidental-release prevention program; and the Local Oversight Program, which interfaces with SWRCB and the San Francisco Bay RWQCB on LUSTs and UST release sites. An HMBP must be submitted if a facility ever handles any individual hazardous material in an aggregate amount equal to or greater than 55 gallons (liquids), 500 pounds (solids), or 200 cubic feet (gases). An HMBP must include:

- Details that include facility floor plans and identify the business conducted at the site;
- An inventory of hazardous materials handled or stored on the site;
- An emergency response plan; and

A training program in safety procedures and emergency response for new employees who may handle hazardous materials, with an annual refresher course in the same topics for those same employees.

California Code of Regulations Title 8 (Workplace Safety Regulations)

The California Division of Occupational Safety and Health (CalOSHA) assumes primary responsibility for developing and enforcing workplace safety regulations. These regulations concern the use of hazardous materials in the workplace, including requirements for employee safety training; availability of safety equipment; accident and illness prevention programs; hazardous-substance exposure warnings; and preparation of emergency action and fire prevention plans.

CalOSHA also enforces hazard communication program regulations, including procedures for identifying and labeling hazardous substances, and requires that safety data sheets (formerly known as material safety data sheets) be available for employee information and training programs. CalOSHA standards are generally more stringent than federal regulations. Construction workers and operational employees within the plan area would be subject to these requirements.

California Code of Regulations, Title 8, Section 1529 authorizes CalOSHA to implement the survey requirements of CFR Title 29 relating to asbestos. These federal and state regulations require

facilities to take all necessary precautions to protect employees and the public from exposure to asbestos. Workers who conduct asbestos abatement must be trained in accordance with federal and State OSHA requirements. The BAAQMD oversees the removal of regulated asbestos-containing materials (see "Asbestos Demolition, Renovation, and Manufacturing Rule" below).

California Code of Regulations Title 8, Section 1532.1 includes requirements to manage and control exposure to lead-based paint. These regulations cover the demolition, removal, cleanup, transportation, storage, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring, and compliance to ensure the safety of construction workers exposed to lead-based material. Loose and peeling lead-based paint must be disposed of as a State and/or federal hazardous waste if the concentration of lead equals or exceeds applicable hazardous waste thresholds. Federal and State OSHA regulations require a supervisor who is certified with respect to identifying existing and predictable lead hazards to oversee air monitoring and other protective measures during demolition activities in areas where lead-based paint may be present. Special protective measures and notification of CalOSHA are required for highly hazardous construction tasks related to lead, such as manual demolition, abrasive blasting, welding, cutting, or torch burning of structures, where lead-based paint is present.

California Code of Regulations Title 14 – Fire Safe Roads

The Board of Forestry maintains fire safe road regulations, as part of CCR Title 14. This includes requirements for road width, surface treatments, grade, radius, turnarounds, turnouts, structures, driveways, and gate entrances. These regulations are intended to ensure safe access for emergency wildland fire equipment and civilian evacuation.

California Code of Regulations Title 22 (Environmental Health Standards for the Management of Hazardous Waste)

California Code of Regulations Title 22, Division 4.5 contains the Environmental Health Standards for the Management of Hazardous Waste, which includes California waste identification and classification regulations. California Code of Regulations Title 22, Chapter 11, Article 3, "Soluble Threshold Limits Concentrations/Total Threshold Limits Concentration Regulatory Limits," identifies the concentrations at which soil is determined to be a California hazardous waste. California's Universal Waste Rule (22 CCR § 66273) provides an alternative set of management standards in lieu of regulation as hazardous wastes for certain common hazardous wastes, as defined in 22 California Code of Regulations Section 66261.9. Universal wastes include fluorescent lamps, mercury thermostats, and other mercury-containing equipment. Existing structures may contain fluorescent light ballasts that could contain mercury or lead. The Alternative Management Standards for Treated Wood Waste (22 CCR § 67386) were developed by DTSC to allow for disposal of treated wood as a nonhazardous waste, to simplify and facilitate the safe and economical disposal of such waste. Chemically treated wood can contain elevated levels of hazardous chemicals (e.g., arsenic, chromium, copper, pentachlorophenol, or creosote) that equal or exceed applicable hazardous waste thresholds. The Alternative Management Standards provide for less stringent storage requirements and extended accumulation periods, allow shipments without a hazardous waste manifest and a hazardous waste hauler, and allow disposal at specific nonhazardous waste landfills.

California Code of Regulations Title 24 (California Building Code)

Updated every three years through a rigorous stakeholder process, Title 24 of the California Code of Regulations requires California homes and businesses to meet strong fire and safety measures. Title

24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The California Building Code is applicable to all development in California. (Health and Safety Code §§ 17950 and 18938(b).)

The regulations receive input from members of industry, as well as the public, with the goal of "[r]educing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy." (Pub. Res. Code § 25402.) These regulations are scrutinized and analyzed for technological and economic feasibility (Pub. Res. Code § 25402(d)) and cost effectiveness (Pub. Res. Code § 25402(b)(2) and (b)(3)).

PART 2 - CALIFORNIA BUILDING CODE: FIRE SAFETY REQUIREMENTS

The State of California provided a minimum standard for building design through the 2022 California Building Standards Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2022 CBC is based on the 2021 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are planchecked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

PART 2 - CALIFORNIA BUILDING CODE: WILDLAND-URBAN INTERFACE BUILDING STANDARDS

On September 20, 2005, the Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the CCR Title 24, Part 2, known as the 2007 CBC. These codes include provisions for ignition-resistant construction standards in the WUI.

Interface zones are areas with dense housing adjacent to vegetation that can burn and meeting the following criteria:

- 1. Housing density class 2 (one house per 20 acres to one house per 5 acres), 3 (more than one house per 5 acres to one house per acre), or 4 (more than one house per acre)
- 2. In Moderate, High, or Very High Fire Hazard Severity Zone
- Not dominated by wildland vegetation (i.e., lifeform not herbaceous, hardwood, conifer, or shrub)
- 4. Spatially contiguous groups of 30-meter cells³³ that are 10 acres and larger

Intermix zones are housing development interspersed in an area dominated by wildland vegetation and must meet the following criteria:

- 1. Not interface
- 2. Housing density class 2
- 3. Housing density class 3 or 4, dominated by wildland vegetation
- 4. In Moderate, High, or Very High Fire Hazard Severity Zone

³³ "30-meter cells" refers to satellite mapping or Geographic Information Systems (GIS) data, and indicates data is presented as 30-meter by 30-meter squares in the source maps used to determine zone types.

- 5. Improved parcels only
- 6. Spatially contiguous groups of 30-meter cells 25 acres and larger

Influence zones have wildfire-susceptible vegetation up to 1.5 miles from an interface zone or intermix zone.³⁴

While the 2007 CBC creates WUI definitions for interface, intermix and influence zones in order to apply required construction standards, many local and regional entities use their own definitions of WUI areas for other purposes, ranging from simple resident awareness and public outreach to further municipal-level standards.

PART 9 - CALIFORNIA FIRE CODE

The 2022 California Fire Code is Part 9 of CCR Title 24. It establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The California Fire Code and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the California Fire Code employs a permit system based on hazard classification. The provisions of this Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout California.

More specifically, the Fire Code is included in CCR Title 24. Title 24, part 9, Chapter 7 addresses fire-resistances-rated construction; CBC (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings located in FHSZs within SRAs and WUI Fire Areas. This code includes provisions for ignition-resistant construction standards for new buildings.

Assembly Bill 747 and Senate Bill 99

Assembly Bill (AB) 747 (2019) requires that the safety element be reviewed and updated to identify emergency evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. This will be a requirement for all safety elements or updates to hazard mitigation plans completed after January of 2022.

³⁴ CAL FIRE. 2019. Wildland Urban Interface (WUI) [map]. Available: https://frap.fire.ca.gov/media/10300/wui_19_ada.pdf (accessed April 2022)

SB 99 (2019) requires review and update of the safety element to include information to identify residential developments in hazard areas that do not have at least two emergency evacuation routes. In essence, this legislation assists in identifying neighborhoods and households within a hazard area that have limited accessibility. This is intended to assist the City with identifying opportunities to improve connectivity and evacuation capacity (generally).

California Porter-Cologne Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The RWQCBs are required to formulate and adopt water quality control plans (also known as basin plans) for all areas of the region and establish water quality objectives in the plans. The Porter-Cologne Act sets forth the obligations of SWRCB and RWQCBs to adopt and periodically update water quality control plans that recognize and reflect the differences in existing water quality, the beneficial uses of the region's groundwater and surface water, and local water quality conditions and problems. It also authorizes SWRCB and the respective RWQCBs to issue and enforce waste discharge requirements and to implement programs for controlling pollution in State waters. Finally, the Porter-Cologne Act also authorizes SWRCB and the respective RWQCBs to oversee site investigation and cleanup for unauthorized releases of pollutants to soils and groundwater and in some cases to surface waters or sediments.

California Fire Plan

The Strategic Fire Plan for California is the State's roadmap for reducing the risk of wildfire. The most recent version of the plan was finalized in January 2019 and directs each CAL FIRE Unit to address and meet incremental requirements to achieve four specific goals by 2023, including improving core capabilities, enhancing internal operations, ensuring health and safety, and building an engaged workforce.³⁵ A core element of the plan is increasing staffing levels from 2.67 employees per position to 3.11 employees per position to ensure adequate staffing during times of increased mobilization.

CAL FIRE has mapped fire threat potential throughout California. CAL FIRE maps fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The threat levels include no fire threat, moderate, high, and very high fire threat. Further, the maps designate the City of Pleasant Hill as the Local Responsibility Area for the plan areas. The CAL FIRE Office of the State Fire Marshal provides oversight of enforcement of the California Fire Code as well as overseeing hazardous liquid pipeline safety.

California Multi-Hazard Mitigation Plan

The California Office of Emergency Services (CalOES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is federally required under the Federal Disaster Mitigation Act of 2000 for the State to receive Federal funding. The Federal Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

³⁵ CAL FIRE. 2019. Strategic Fire Plan for California. https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/fire-plan/ (accessed April 2022).

California Emergency Plan

The foundation of California's emergency planning and response is a Statewide mutual aid system, which is designed to ensure that adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to the agreement to prepare operational plans to use within their jurisdiction, and outside their area. These plans include fire and non-fire emergencies related to natural, technological, and war contingencies. The State of California, all State agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the "California Emergency Services Act," states that "the State Emergency Plan shall be in effect in each political subdivision of the State, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." The Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the Act are reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the California Emergency Plan. The State Emergency Plan conforms to the requirements of California's Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies. The SEMS incorporates the functions and principles of the Incident Command System (ICS), the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under State disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and State. CalOES divides the State into several mutual aid regions. Contra Costa County is located in Mutual Aid Region II, which includes Del Norte, Humboldt, Mendocino, Sonoma, Lake, Napa, Marin, Solano, Contra Costa, San Francisco, San Mateo, Alameda, Santa Clara, Santa Cruz, San Benito, and Monterey Counties. 36

California Senate Bill 1241

California Senate Bill (SB) 1241 requires cities and counties to address fire risk in SRAs and Very High FHSZs in the safety element of their general plans. The bill also amended CEQA to direct amendments to the *CEQA Guidelines* Appendix G environmental checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and Very High FHSZs. In adopting these Guidelines amendments, the Governor's Office of Planning and Research recognized that generally, low-density, leapfrog development may create higher wildfire risks than high-density, infill development.³⁷ In general, new development that will be contemplated within the General Plan area would not be considered leapfrog development sites, as they are located near existing development.

³⁶ CalOES. 2022. Coastal Region Operational Area Assignments. March 2022. Available:

https://www.caloes.ca.gov/RegionalOperationsSite/Documents/EMA_ESC_OA_Assignments_Coastal.pdf (accessed April 2022)

³⁷ "Leapfrog development" describes the construction of new development at a distance from existing developed areas, with undeveloped land between the existing and new development.

California Public Resources Code

The California Public Resources Code (PRC) includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas.

- These regulations include the following: Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance
 of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction
 contractor would maintain the appropriate fire suppression equipment (PRC § 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431).

California Public Utilities Commission General Order 166

General Order 166 Standard 1.E requires that investor-owned utilities (IOU) develop a Fire Prevention Plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that IOUs outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans created by IOUs are required to identify specific parts of the utility's service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the California Public Utilities Commission (CPUC) regarding compliance with General Order 166.³⁸ Pacific Gas and Electric Company (PG&E) is the electric utility provider for the City of Pleasant Hill. At the time of issuance of the Notice of Preparation for this EIR, the most recently available report for PG&E was dated October 31, 2019.³⁹ PG&E has developed an interim fire threat map that shows very high fire threats west of the City of Pleasant Hill.⁴⁰

Regional and Local Regulations

BAAQMD Asbestos Demolition, Renovation and Manufacturing Rule

The removal of asbestos-containing building materials is subject to the limitations of BAAQMD Regulation 11, Rule 2, "Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing." This rule prohibits visible emissions to outside air from any operation involving the demolition of any structure containing asbestos, and sets out requirements for demolition of such structures, including a pre-demolition survey conducted by a certified professional. All friable (i.e., crushable by hand) asbestos-containing materials or nonfriable asbestos-containing materials that may be damaged must be abated before demolition in accordance with applicable requirements. Friable

³⁸ CPUC. 2017. General Order Number 165. December 2017. Available:

http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K552/209552704.pdf (accessed April 2022)

³⁹ CPUC. 209. Wildfire and Wildfire Safety. Available: https://www.cpuc.ca.gov/industries-and-topics/wildfires (accessed April 2022).

⁴⁰ CPUC. 2019. CPUC High Fire Threat District (HFTD) [map]. Available:

https://capuc.maps.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa2 (accessed November 2022).

asbestos-containing materials must be disposed of as asbestos waste at an approved facility. Nonfriable asbestos-containing materials may be disposed of as nonhazardous waste at landfills that accept such wastes.

Association of Bay Area Governments Hazard Mitigation Plan

The Association of Bay Area Governments' multijurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area was updated in 2010 in partnership with Bay Conservation and Development Commission Adapting to Rising Tides Program to support local governments in the regional plan for existing and future hazards of climate change. This detailed 5-year plan identifies potential natural and human-made hazards, assesses their potential risks, and includes mitigation methods to reduce risks. The potential hazards identified in the Plan include earthquakes and liquefaction, wildfires, floods, drought, solar storms, dam or levee failure, disease outbreak, freezes, wind, heat, thunder and lightning storms, siltation, tornadoes, hazardous materials, slope failure and mudflows, and other hazards. Similarly, Plan mitigation measures include hazard event planning, emergency preparedness coordination, education, facility upgrades, and monitoring actions.

Contra Costa County Hazard Mitigation Plan

The Contra Costa County Hazard Mitigation Plan (HMP) contains goals and objectives that are intended to reduce loss of life and property from natural disasters. ⁴¹ During the planning process, this plan used Federal Emergency Management Agency (FEMA) tools to determine the most likely possible threats would be earthquakes, flooding, landslides, tsunamis, and wildfires in urban interface zones. The HMP identifies mitigation action items that aim to meet objectives and reduce the impacts of these hazards. The Contra Costa County Office of Emergency Services and Contra Costa County Department of Conservation and Development share the lead responsibility for overseeing the Plan implementation and maintenance strategy. Plan implementation and evaluation will be a shared responsibility among all planning partnership members and agencies identified as lead agencies in the mitigation action plans.

Contra Costa County Emergency Operations Plan

The purpose of the Contra Costa County Operational Area (OA) Emergency Operations Plan (EOP) is to provide the basis for a coordinated response before, during, and after an emergency affecting Contra Costa County. 42 The emergency operations plan identifies and facilitates inter-agency coordination in emergency operations. The Plan applies to all emergencies in unincorporated areas of Contra Costa County and within incorporated areas when those emergencies require multiagency coordination at the operational area level.

Contra Costa Household Hazardous Waste Program

Contra Costa County operates three drop-off locations in the western portion, central portion, and eastern portion of the county. The three facilities allow for residents and qualified small businesses to drop off accepted hazardous waste. Hazardous waste that is accepted includes chemical bottles, acids and caustics, batteries, light bulbs, motor oil, pesticides, and solvents.⁴³

⁴¹Contra Costa County. 2018. Contra Costa County Hazard Mitigation Plan.

 $^{^{\}rm 42}\text{Contra}$ Costa County. 2018. Emergency Operations Plan. Available:

https://www.cocosheriff.org/home/showpublisheddocument/168/637284267426930000 (accessed November 2022)

⁴³ Contra Costa County. 2022. Available:: http://www.co.contra-costa.ca.us/depart/cd/recycle/options/v5951.htm

Contra Costa County Ordinance Code

Division 450, Hazardous Materials and Wastes, of the Contra Costa County Ordinance Code provides regulations regarding hazardous material response plans, inventories, underground storage, and risk management. In part, this County Ordinance Code division requires that any business that handles a specific quantity of hazardous materials establish a business plan for emergency response to a release or threatened release of a hazardous material.

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous-materials incidents is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. The Contra Costa County Office of the Sheriff: Emergency Services Division coordinates response to emergencies in the County. Emergency response team members respond and work with local fire and police agencies, emergency medical providers, the California Highway Patrol, CAL FIRE, CDFW, and Caltrans.

Buchanan Field Airport Land Use Compatibility Plan (ALUCP)

The purpose of the Contra Costa County Airport Land Use Compatibility Plan (ALUCP) is to establish procedures and criteria by which, in accordance with the California State Aeronautics Act:

1.1.1. Contra Costa County Airport Land Use Commission (ALUC) — The ALUC:

- a) Shall review proposed land use development in Contra Costa County and affected cities within the county for compatibility with airport activity.
- b) Shall review certain types of airport development proposals which are also subject to ALUC review and are addressed by the Plan.
- **1.5.1. Actions Which Always Require ALUC Review** As required by state law, the following types of actions shall be referred to the ALUC for determination of consistency with the ALUCP prior to their approval by the local jurisdiction:
- 1) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport influence area (State Aeronautics Act Section 21676(b)).
- **1.5.3. Major Land Use Actions** The scope or character of certain proposed major land use actions, as listed below, is such that their compatibility with airport activity is a potential concern. Even though these actions may be basically consistent with the local general plan or specific plan, sufficient detail may not be known to enable a full airport compatibility evaluation at the time that the general plan or specific plan is reviewed. To enable better assessment of compliance with the compatibility criteria set forth herein, ALUC review of these actions may be warranted.

Depending upon the circumstances indicated in Countywide Policy 1.5.3 above, such reviews may be either required or requested.

- (a) For the Buchanan Field Airport environs:
 - 2) Actions affecting land uses within the composite 55 dB CNEL noise contour or any Safety Zone (see Figures 3B and 3C in Chapter 3 of the ALUCP):
 - Proposed residential development, including land divisions, consisting of 20 or more acres and 5 or more lots.
 - Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater.

- 3) Additionally:
 - Within Safety Zones 3 or 4: Any proposal for new development (including buildings, antennas, and other structures) more than 50 feet tall.

Pleasant Hill General Plan

The current Pleasant Hill General Plan contained policies related to hazards, hazardous materials, and wildfire, but they would be replaced by the proposed 2040 General Plan.

3.7.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to hazards/hazardous materials and wildfire.

Would the 2040 General Plan:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?
- h) If located in or near State responsibility areas or lands classified as Very High Fire Hazard Severity Zones:
 - 1. Substantially impair an adopted emergency response plan or emergency evacuation plan?
 - 2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
 - 3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
 - 4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Approach to Analysis

Environmental impacts related to hazards and hazardous materials and wildfire have been assessed using impact significance criteria from federal, State, and local regulations. The impact analysis is based on available literature regarding the existing plans, policies, and resources in the General Plan area. Criteria used during this analysis are described below.

Hazards (specific to Hazardous Materials Upset and Exposure Risk)

This evaluation focuses on whether the proposed plan would result in changes to the physical environment that would cause or exacerbate adverse effects related to the use, transportation, disposal, accidental release, or emission of hazardous materials. Potential construction-related and operational impacts from existing hazardous materials in soils, sediments, groundwater, surface water, and structures are evaluated using available information from the Department of Toxic Substances Control and the State Water Resources Control Board.

Hazards (specific to Aviation Safety and Noise Exposure Risk)

The airport safety zones and noise contours for the Buchanan Field Airport with respect to the Pleasant Hill area were utilized to determine potential impacts from exposure to aviation-related hazards and noise.

Emergency Evacuation and Response

The City does not have significance thresholds related to emergency access. The City Municipal Code adopts the California Fire Code. The evaluation includes a determination of whether the changes to the physical environment caused by the proposed plan would impair or interfere with emergency response plans.

In addition, pursuant to California Attorney General Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act, this evaluation assesses whether projects located in or near State responsibility areas or lands classified as very high fire hazard severity zones would substantially impair an adopted emergency response plan or emergency evacuation plan.

Wildfire Exposure Risk

The California Department of Forestry and Fire Protection Hazard Severity Maps were consulted in determining Pleasant Hill's proximity to State Responsibility Areas or lands classified as very high fire hazard severity zones. Impacts related to wildfire hazards and risks were evaluated using FHSZ mapping for Contra Costa County, aerial imagery, and topographic mapping. Additionally, weather patterns related to prevailing winds and precipitation trends were evaluated as they relate to the spread and magnitude of wildfire. It was assessed whether the proposed plan would risk exacerbating those existing environmental conditions or causing new direct, indirect, or cumulative impacts to other aspects of the environment.

California Attorney General Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act restates the CEQA requirement that an EIR analyze "any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the are affected," including by locating development in wildfire risk areas. As such, this evaluation assesses whether projects located in or near State responsibility areas or lands classified as very high fire hazard severity zones would

exacerbate wildfire risks, and thereby expose people or structures to significant risks during or post wildfire event; require the installation of emergency-related infrastructure; or result in temporary or ongoing impacts to the environment.

EIR Scoping Comments Consideration

This section also addresses comments received from the Department of Toxic Substances Control in response to the EIR NOP related to hazardous waste, hazardous materials, and presence of hazardous materials and are discussed in the impact analysis below in Impact HAZ-1 and HAZ-2.

Specific Significance Thresholds

For purposes of this analysis, the following thresholds are used to evaluate the significance of hazards/hazardous materials and wildfire impacts resulting from implementation of the proposed plan.

- Routine transport, use, and/or dispose of hazardous materials in a manner that would create a significant hazard to the public or the environment.
- Regular transport of hazardous materials to/from the plan areas on an unsuitable road or use of highly volatile hazardous materials, which would create a significant hazard to the public or the environment.
- Location of new development within 0.25 mile of an existing or proposed school in conjunction with hazardous emissions or handle hazardous materials, waste, or substances.
- Location of new development on a hazardous materials sites lists such as CalEPA, California
 Facility Inventory Database (CA FID) UST and State Water Efficiency and Enhancement Program
 (SWEEP), HAZNET, California DTSC EnviroStor, BAAQMD, and/or the SWRCB GeoTracker
 regulated facilities databases for files related to possible Recognized Environmental Conditions.
- Location of new development within an airport land use plan or within two miles of a public airport and reduction of safety of people working or residing in the plan areas.
- Impairing implementation of or interfere with an adopted emergency response plan or emergency evacuation plan via blockage of an evacuation route or provision of only one access point for emergency vehicles.
- Placement of housing or offices in a designated WUI zone or proximate to unmanaged open space area that is susceptible to wildfires.
- Impaired implementation of or interference with an adopted emergency response plan or emergency evacuation plan via blockage of an evacuation route or provision of only one access point for emergency vehicles.
- Location of new development in or near area of steep slopes, high-wind areas, or historical
 wildfire burn areas leading to greater wildfire risk and, thereby, exposing occupants to smoke
 and other wildfire-related air pollutants.
- Installation or maintenance of roads, fuel breaks, emergency water sources, electrical power lines, or natural gas lines that may exacerbate fire risk.
- Location of new development in or near area of wildfire-scarred slopes or altered drainage areas and, thereby, exacerbating flooding and landslide hazards.

Impact Evaluation

Hazardous Materials Upset and Exposure

Significance Criterion a: Would the proposed plan create a significant hazard to the public or the

environment through the routine transport, use, or disposal of hazardous

materials?

Significance Criterion b: Would the proposed plan 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?

Significance Criterion c: Would the proposed plan emit hazardous emissions or handle hazardous

or acutely hazardous materials, substances, or waste within 0.25 mile of an

existing or proposed school?

Impact HAZ-1 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN COULD RESULT IN THE RELEASE OF POTENTIALLY HAZARDOUS MATERIALS, WHICH MAY OCCUR WITHIN 0.25 MILE OF A SCHOOL. HOWEVER, COMPLIANCE WITH LOCAL, REGIONAL, STATE, AND FEDERAL REGULATIONS RELATED TO HAZARDOUS MATERIALS WOULD MINIMIZE THE RISK OF RELEASES AND EXPOSURE TO THESE MATERIALS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The use of hazardous materials is typically associated with industrial land uses. Activities such as manufacturing, plating, cleaning, refining, and finishing, frequently involve chemicals that are considered hazardous when accidentally released into the environment.

To a lesser extent, hazardous materials may also be used by various commercial enterprises, as well as residential uses. In particular, dry cleaners use cleaning agents considered to be hazardous materials. Hardware stores typically stock paints and solvents, as well as fertilizers, herbicides, and pesticides. Swimming pool supply stores stock acids, algaecides, and caustic agents. Most commercial businesses occasionally use commonly available cleaning supplies that, when used in accordance with manufacturers' recommendations, are considered safe by the State of California, but when not handled properly can be considered hazardous. Private residences also use and store commonly available cleaning materials, paints, solvents, swimming pool and spa chemicals, as well as fertilizers, herbicides, and pesticides.

If improperly handled, hazardous materials can result in public health hazards through human contact with contaminated soils or groundwater, or through airborne releases in vapors, fumes, or dust. There is also the potential for accidental or unauthorized releases of hazardous materials that would pose a public health concern. The use, transport, and disposal of hazardous materials and wastes are required to occur in accordance with Federal, State, and local regulations. In accordance with such regulations, the transport of hazardous materials and wastes can only occur with transporters who have received training and appropriate licensing. Additionally, hazardous waste transporters are required to complete and carry a hazardous waste manifest, which includes forms, reports, and procedures designed to seamlessly track hazardous waste.

Additional protective regulations apply to projects that could use or disturb potentially hazardous products near or at schools. The California Public Resources Code requires projects that would be located within 0.25 mile of a school and might reasonably be expected to emit or handle hazardous

materials to consult with the school district regarding potential hazards. Numerous day care facilities, charter schools, and private schools are also located throughout Pleasant Hill.

Construction

Construction associated with the 2040 General Plan would primarily consist of infill and development construction throughout Pleasant Hill. Infill and development construction can involve demolition of existing structures. Demolition could result in emission of lead and asbestos if building materials contain these substances. However, lead-based materials and asbestos exposure are regulated by the CalOSHA. CCR Section 1532.1 requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards. Under this rule, construction workers (and by extension, neighboring properties) may not be exposed to lead at concentrations greater than 50 micrograms per cubic meter of air averaged over an eighthour period and exposure must be reduced to lower concentrations if the construction workday exceeds eight hours. Similarly, CCR Section 1529 sets requirements for asbestos exposure assessments and monitoring, methods of complying with exposure requirements, safety wear, communication of hazards, and medical examination of workers.

The control of asbestos during demolition or renovation of buildings is regulated under the Federal Clean Air Act. The Federal Clean Air Act requires a thorough inspection for asbestos where demolition will occur and specifies construction work practices to control emissions, such as removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable. ⁴⁴ Compliance with applicable standards would ensure construction impacts related to hazardous materials, specifically asbestos, release would be less than significant.

Friable ACMs are regulated as a hazardous air pollutant under the Clean Air Act. As a construction worker safety hazard, they are also regulated under the authority of CalOSHA and by the Bay Area Air Quality Management District. In structures that would be demolished, any ACMs would be abated in accordance with State and Federal regulations prior to the start of demolition or renovation activities and in compliance with all applicable existing rules and regulations, including the Bay Area Air Quality Management District. These programs would ensure that asbestos removal would not result in the release of hazardous materials to the environment that could impair human health. As such, construction impacts related to hazardous materials, specifically ACMs, release would be less than significant.

Fluorescent lighting ballasts manufactured prior to 1978, and electrical transformers, capacitors, and generators manufactured prior to 1977, may contain PCBs. In accordance with the Toxic Substances Control Act and other federal and State regulations, individual projects would be required to properly handle and dispose of electrical equipment and lighting ballasts that contain PCBs during demolition of older buildings, ensuring that construction impacts related to hazardous materials, specifically PCBs, release would be less than significant.

The use of construction machinery would involve the transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking. Additionally, hazardous materials would be needed for fueling and servicing construction equipment. These types of hazardous materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials

⁴⁴ USEPA. 2021. Asbestos Laws and Regulations. Available: https://www.epa.gov/asbestos/asbestos-laws-and-regulations (accessed April 2022)

are regulated by County, State, and Federal regulations and compliance with applicable standards discussed under Section 3.7.3, *Regulatory Framework*, would ensure construction impacts related to the transport, use, and disposal of hazardous materials would be less than significant.

Compliance with existing applicable regulations and policies would minimize risks from routine use, transport, handling, storage, disposal, and release of hazardous materials during construction. Oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these substances. There are ten schools located within the General Plan area. Four of these schools, as shown in Figure 3.11-2 of Section 3.11, *Public Services and Recreation,* are located near an identified hazardous materials transportation route. Transport of hazardous materials along the I-680 and Contra Costa Boulevard routes would be subject to Federal, state, and local regulations as discussed under Section 3.7.3, *Regulatory Framework,* that would reduce potential impacts of hazardous materials releases proximate to schools. Therefore, 2040 General Plan construction impacts related to a hazard to the public or the environment through routine transport, use or disposal of hazardous materials or reasonably foreseeable upset and/or accidental release of hazardous materials, including within 0.25 mile of a school, would be less than significant.

Operation

Development facilitated by the 2040 General Plan would result in the addition of residential units and commercial, office, school, semi-public, and industrial development throughout Pleasant Hill. Housing and other residential uses do not utilize substantial quantities of hazardous materials and, thereby, pose little risk of exposing the public to hazardous materials. Commercial, office, and semi-public development would be subject to compliance with CCR, Cal OSHA, and other agencies to ensure hazardous materials risks to the public are minimized during operational use and transport as well.

The proposed plan would facilitate residential, commercial, office, school, semi-public, and industrial development in the vicinity of some existing schools. However, the various land uses facilitated by the 2040 General Plan would be required to comply with applicable laws and regulations for the handling of hazardous materials. These land uses would not emit large quantities of hazardous materials or substances. Development of sites within Pleasant Hill may have preexisting contamination and would be remediated through coordination with the appropriate regulatory agency pursuant to federal, State, and local regulations as listed in Section 3.7.3, *Regulatory Framework*.

Compliance with existing applicable regulations and policies would minimize risks from routine use, transport, handling, storage, disposal, and release of hazardous materials. Oversight by the appropriate federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these substances. While I-680 and Contra Costa Boulevard are located near four schools, transport of hazardous materials along these routes would be subject to federal, State, and local regulations as listed in Section 3.7.3, *Regulatory Framework*, that would reduce potential impacts of releases proximate to schools. Therefore, 2040 General Plan operational impacts related to a hazard to the public or the environment through routine transport, use or disposal of hazardous materials or reasonably foreseeable upset and/or accidental release of hazardous materials, including within 0.25 mile of a school, would be less than significant.

City of Pleasant Hill

Pleasant Hill 2040 General Plan

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Hazardous Materials Site Risks

Significance Criterion d: Would the proposed plan be located on a site that is included on a list of

hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public

or the environment?

Impact HAZ-2 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN COULD RESULT IN DEVELOPMENT ON SITES CONTAMINATED WITH HAZARDOUS MATERIALS. HOWEVER, COMPLIANCE WITH APPLICABLE REGULATIONS RELATING TO SITE REMEDIATION WOULD MINIMIZE IMPACTS FROM DEVELOPMENT ON CONTAMINATED SITES, RESULTING IN A LESS THAN SIGNIFICANT IMPACT.

Construction

Given that potential construction sites are required by DTSC and the Regional Water Quality Control Board to be remediated and/or capped in a manner deemed appropriate by the responsible agency prior to construction activities occurring, construction impacts would be reduced through federal, State, and local regulations. Therefore, the 2040 General Plan would not create a hazard to the public or environment during construction, and impacts related to locating buildings within the General Plan area on a hazardous materials site per Government Code Section 65962.5 would be less than significant.

Operation

Existing sites that use or have previously used hazardous materials or that may contain contaminants in soils or groundwater in Pleasant Hill include large- and small-quantity generators of hazardous waste, such as gas stations, dry cleaners, and industrial uses. Specifically, there are 10 sites containing or potentially containing hazardous materials contamination located in Pleasant Hill, five of which are located along northwestern Contra Costa Boulevard, one along southeastern Contra Costa Boulevard north of Gregory Lane, two are located in the southeastern area of the city along Vincent Road north of Mayhew Way, and the last two are located along Hookston Road in the southeastern area of Pleasant Hill. Potential development facilitated by the 2040 General Plan on identified hazard sites would be preceded by investigation, remediation, and cleanup under the supervision of the Regional Water Quality Control Board, the Contra Costa Health Services, or DTSC, before any development activities could begin as currently required by federal, State, and local regulations. The agency responsible for oversight would determine the types of remediation and cleanup required and could include excavation and off-haul of contaminated soils, installation of vapor barriers beneath habitable structures, continuous monitoring wells onsite with annual reporting requirements, or other mechanisms to ensure the site does not pose a health risk to workers or future occupants. Compliance with the following 2040 General Plan Hazards and Safety Element goals and policies would also apply to future development facilitated by the 2040 General Plan:

- Goal HS-8 Reduce the exposure to hazardous substances and the resulting potential for injuries, economic and social displacement, and loss of life.
 - **HS-8.1 Hazardous Materials Business Plans**. Monitor and regulate hazardous materials by requiring the preparation and periodic updating Hazardous Materials Business Plans for and periodic inspections of all businesses in the city that handle, store, use, or transport hazardous materials.
 - **HS-8.2** Water and Air Supply Protection. Work with public agencies and private organizations to identify and eliminate hazardous material releases into the water and air supply.
 - **HS-8.3 Site Assessment Requirement.** Require Phase I Site Assessments for projects on all properties where toxins could occur.
 - **HS-8.4 Alternative Practices.** Minimize the use of toxic and hazardous materials in Pleasant Hill, promoting sustainable materials and practices where possible.
 - **HS-8.5 Household Hazardous Waste.** Expand and promote household hazardous waste programs to safely dispose of items such as paint, gasoline, engine oil, batteries, and cleaners.
 - **HS-8.6 Hazardous Material Transportation Routes.** Work with appropriate agencies to identify and require all transport of hazardous materials to follow approved routes.

It is also possible that underground storage tanks (UST) in use prior to permitting and record keeping requirements may be present in the General Plan area. If an unidentified UST were uncovered or disturbed during construction activities, it would be removed under permit from the City; if such removal would potentially undermine the structural stability of existing structures, foundations, or impact existing utilities, the tank might be closed in place without removal. Tank removal activities could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing standards contained in Division 20, Chapters 6.7 and 6.75 (UST Program) of the California Health and Safety Code as enforced and monitored by the Environmental Programs Division.

The extent to which groundwater may be affected by an UST or other potential contamination source, if at all, depends on the type of contaminant, the amount released, the duration of the release, distance from source, and depth to groundwater. If groundwater contamination is identified, characterization of the vertical and lateral extent of the contamination and remediation activities would be required by the Regional Water Quality Control Board prior to the commencement of any new construction activities that would disturb the subsurface. If contamination exceeds regulatory action levels, the developer would be required to undertake remediation procedures prior to grading and development under the supervision of the Regional Water Quality Control Board, depending upon the nature of any identified contamination. Compliance with existing State and local regulations would result in the 2040 General Plan not increasing the likelihood for development of identified hazard sites compiled pursuant to Government Code Section 65962.5. Therefore, the 2040 General Plan would not create a hazard to the public or environment during operation, and impacts related to locating buildings within the General Plan area on a hazardous materials site per Government Code Section 65962.5 would be less than significant.

City of Pleasant Hill

Pleasant Hill 2040 General Plan

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Aviation Hazards

Significance Criterion e: For location 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 proposed plan result in a safety hazard or excessive noise for people residing or working in the plan areas?

Impact HAZ-3 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT RESULT IN SIGNIFICANTLY INCREASED AIRPORT AND AIRSTRIP ACTIVITY. COMPLIANCE WITH STATE AND FEDERAL REGULATIONS, CONTRA COSTA AIRPORT LAND USE COMPATIBILITY PLAN, AND PROPOSED 2040 GENERAL PLAN POLICIES WOULD MINIMIZE SAFETY HAZARDS AND DISTURBANCE TO PEOPLE RESIDING OR WORKING WITHIN PROXIMITY OF THE BUCHANAN FIELD AIRPORT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction equipment would be required to comply with all ALUCP height limits and other safety requirements. Impacts related to safety hazards and excessive noise for people residing or working the plan areas are limited to operational impacts. No respective construction impacts would occur.

Operation

AVIATION SAFETY HAZARDS EXPOSURE

The Buchanan Field Airport is a public airport that has a recently renovated runway, aviation services and facilities, emergency response services, access to Bay Area transportation and business centers, and related transportation amenities. The northeast portion of the city is located within Safety Zones 3 and 4.

Further, individual projects as a result of development facilitated by the 2040 General Plan would be subject to all development standards if projects are located within Safety Zone 4, in the northeastern portion of the city, and other policies contained within the Contra Costa County Airport Land Use Compatibility Plan intended to reduce land use conflicts with airport operations. Such measures are required for the Buchanan Field Airport.

The following policies from the 2040 General Plan would serve to reduce aviation safety hazard associated with operation of the Buchanan Field Airport:

- Goal HS-6 Ensure that airport operations do not adversely affect quality of life and safety for residents.
 - **Policy HS-6.1** Airport Land Use Compatibility Plan Adherence. Ensure consistency with the County Airport Land Use Compatibility Plan development restrictions.

Policy HS-6.2 Airport Coordination. Coordinate with Buchanan Field Airport on land use considerations where compatibility issues may occur on the border of the airfield.

Compliance with these 2040 General Plan policies and the Buchanan Field Airport ALUCP goals and policies would reduce operational impacts related to aviation safety hazards to less than significant.

EXCESSIVE AVIATION NOISE EXPOSURE

A significant impact would occur if a project would expose people residing or working in the project area to excessive 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.

Development facilitated by the 2040 General Plan would not be expected to significantly increase airport activities and airport noise. Existing requirements for airports would reduce the noise impacts of airport activity on residents and workers. Title 21 of the California Code of Regulations establishes noise standards for airports and the responsibilities of the regional Airport Land Use Commissions, which prepare land use compatibility plans with thorough evaluations of airport noise as detailed in Section 3.10, *Noise*. Additionally, the Federal Aviation Administrative Regulation Part 150 Airport Noise Compatibility Program is designed to reduce the effect of airport noise on the surrounding communities as airports expand.

The Buchanan Field Airport is a public airport that has a recently renovated runway, aviation services and facilities, emergency response services, access to Bay Area transportation and business centers, and related transportation amenities. Development facilitated by the 2040 General Plan is not expected to directly increase airport activities and airport noise. Existing requirements for airports would reduce the noise impacts of airport activity on residents and workers. Title 21 of the California Code of Regulations establishes noise standards for airports and the responsibilities of the regional Airport Land Use Commissions, which prepare land use compatibility plans with thorough evaluations of airport noise, as described above in Section 3.10, *Noise*. Additionally, the Federal Aviation Administrative Regulation Part 150 Airport Noise Compatibility Program is designed to reduce the effect of airport noise on the surrounding communities as airports expand.

Further, individual projects as a result of development facilitated by the 2040 General Plan would be subject to all development standards if the project is located within Safety Zone 4 of the Buchanan Field Airport, and other policies contained within the Contra Costa County Airport Land Use Compatibility Plan intended to reduce land use conflicts with airport operations. Such measures are required for the Buchanan Field Airport, which are outlined in Section 3.10, *Noise*.

As required by General Plan 2040 Policy HS-7.1, new development would be required to be designed and constructed to meet acceptable noise level standards adopted by the City. Additionally, as required by Policy HS-7.2, noise impacts from new development would be evaluated based on the potential for significant increases in noise levels and compliance with acceptability standards. Acoustical design features would be required, if necessary, to comply with City noise standards. Program O of the Hazards and Safety Element also requires the establishment of acoustical study requirement areas which would determine when acoustical studies shall be required for sensitive land uses.

Lastly, the following proposed 2040 General Plan Hazards and Safety Element policies would reduce noise from the Buchanan Field Airport.

- Goal HS-6 Ensure that airport operations do not adversely affect quality of life and safety for residents.
 - **Policy HS-6.1** Airport Land Use Compatibility Plan Adherence. Ensure consistency with the County Airport Land Use Compatibility Plan development restrictions.
 - **Policy HS-6.2** Airport Coordination. Coordinate with Buchanan Field Airport on land use considerations where compatibility issues may occur on the border of the airfield.

With the aforementioned requirements in place and implementation of proposed 2040 General Plan policies and programs, Buchanan Field Airport activity would not expose residents and workers in the General Plan area to excessive noise levels. Therefore, 2040 General Plan operational impacts related to consistency with land use compatibility standards would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Emergency Response and Evacuation Plans Consistency

Significance Criterion f: Would the proposed plan impair implementation of or physically interfere

with an adopted emergency response plan or emergency evacuation

plan?

Significance Criterion h: If located in or near State responsibility areas or lands classified as very

high fire hazard severity zones, would the proposed plan:

1. Substantially impair an adopted emergency response plan or

emergency evacuation plan?

Impact HAZ-4 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD RESULT IN ADDITIONAL POPULATION AND VEHICLE MILES TRAVELED IN THE CITY. THE PROPOSED PLAN COULD RESULT IN CHANGES TO EMERGENCY EVACUATION ROUTES OR WOULD SUBSTANTIALLY INCREASE ROADWAY CONGESTION SUCH THAT THE USE OF AN EVACUATION ROUTE WOULD BE HINDERED. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Construction

Potential construction related to implementation of the 2040 General Plan is expected to entail construction equipment and vehicles that would access and leave the plan area, which in turn could potentially temporarily impede evacuation or emergency vehicle access. However, as discussed under Impact TRA-4 in Section 3.12, *Transportation*, the proposed plan would result in less than significant impacts related to emergency vehicle access. In addition, the proposed plan would comply with the Contra Costa County Emergency Operation Plan and Contra Costa County Local Hazard Mitigation Plan, ensuring efficient response to emergency incidents associated with emergencies affecting Pleasant Hill. In addition, future projects that would undergo project-level CEQA review would prepare a construction management plan to ensure adequate transportation

circulation and access throughout the construction period. Therefore, construction impacts related to emergency response and evacuation would be less than significant.

Operation

Contra Costa County implements the Contra Costa County EOP, which addresses the response to emergency incidents associated with emergencies affecting Contra Costa County, including Pleasant Hill. The County EOP establishes the emergency management organization for emergency response, establishes operational concepts associated with emergency management, and provides a flexible platform for planning emergency response in the County. Consistent with the County EOP goals (Save Lives, Protect Property, Preserve the Environment, and Restore Essential Services) and objectives (Mitigate Hazards, Meet Basic Human Needs, Address Needs of People with Disabilities and Others with Access and Functional Needs, and Support Community and Economic Recovery), development facilitated by the 2040 General Plan would provide two vehicle access points and adequate fire truck and apparatus turning radii and clearance for purposes of adequate emergency access and response within Pleasant Hill. As such, implementation of emergency response and evacuation procedures would not be affected as a result of development facilitated by the 2040 General Plan. Compliance with the following 2040 General Plan Hazards and Safety Element policies and program would reduce potential impediment of implementation of wildfire emergency response and evacuation:

- **HS-3.8** Adequate Water Pressure. Coordinate with local water districts to seek funding and implement the necessary infrastructure upgrades to provide adequate water pressure to supply required fire suppression systems in existing and future development projects.
- **HS-3.11 Evacuation Routes.** The City shall collaborate with Contra Costa County and neighboring cities as a part of the next Multijurisdictional Hazard Mitigation Plan update to identify evacuation routes in the event of wildfires or other natural disasters in compliance with AB 747 and SB 99.

Hazards and Safety Element Implementation Programs

Program H Contra Costa County Multijurisdictional Hazard Mitigation Plan. The City shall actively participate in the next update of the Contra Costa Multijurisdictional Hazard Mitigation Plan that, among other outcomes, will identify evacuation routes in the city in compliance with AB 747 and SB 99.

These 2040 General Plan policies requiring adequate fire suppression water pressure and identified wildfire evacuation routes as well as the County EOP would ensure coordination among federal, State, and local plans and agencies, adequate public and interagency communication during hazard events, and providing evacuation assistance for those with limited mobility or lack of access to a vehicle for evacuation.

The 2040 General Plan does not propose physical changes such as realigned or closed-off roadways or changes in general transportation circulation and access that would interfere or impair emergency response or evacuation within or through the plan areas. As such, the proposed plan would also not result in changes to emergency evacuation routes such that use of an evacuation route, including I-680 and SR-24, would be hindered.

Development facilitated by the proposed plan would accommodate future population growth and would increase vehicle miles traveled in the City. This could lead to increased roadway congestion

during emergency evacuations. However, the City would review and approve projects within the plans areas to ensure that emergency access meets City standards. Development facilitated by the proposed plan would also comply with road standards and are reviewed by the Contra Costa County Fire Protection District to ensure development would not interfere with evacuation routes and would not impede the effectiveness of evacuation plans.

Although the 2040 General Plan includes policies and programs that would address emergency response and emergency evacuation, guidance resulting from compliance with AB 747 and SB 99 is not currently available. As such, the 2040 General Plan operational impacts related to impairment of an adopted emergency response plan or emergency evacuation plan would be significant and unavoidable and no feasible mitigation would reduce this impact.

Mitigation Measures

No feasible mitigation exists.

Level of Significance

Significant and unavoidable

Wildfire Exposure/Exacerbation Risk

Significance Criterion g:	Would the proposed plan expose people or structures, either directly or
	indirectly, to a significant risk of loss, injury, or death involving wildland

fires?

Significance Criterion h: If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the proposed plan:

- 2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- 3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- 4. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact HAZ-5 Pleasant Hill is not located within or near a Very High Fire Hazard Severity Zone or State Responsibility area; however, portions of Pleasant Hill are located in and near a High Fire Hazard Severity Zone, a Local Responsibility area, and areas of vegetated open space. Compliance with applicable codes and regulations would not fully reduce the risk of loss, injury, or death from wildfire associated with 2040 General Plan Development. This impact would be significant and unavoidable even with mitigation.

Construction

Impacts related to wildfire hazard risks affecting people, structures, or emergency response and evacuation plans are limited to operational impacts. No construction impacts would occur.

Operation

Pleasant Hill (i.e., the General Plan area) contains some steep terrain and is located near open space areas in the westernmost portion. Briones Regional Park directly abuts the western edge of the General Plan area. Pleasant Hill is not located in or near a Very High Fire Hazard Severity Zone in or near⁴⁵ a State Responsibility Area (VHFHSZ); the nearest VHFHSZ in a State Responsibility Area is located approximately four miles west of the General Plan area. However, there is a high fire hazard severity zone in a Local Responsibility Area located within the southwestern portion of Pleasant Hill City Limits and in areas adjacent to City Limits within the Pleasant Hill Sphere of Influence and further to the west.

Development facilitated by the 2040 General Plan would be subject to the California Fire Code, which includes safety measures to minimize the threat of fire such as noncombustible or ignition-resistant building materials for exterior from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Fire sprinklers would also be required in residential developments pursuant to the Contra Costa County Code and Chapter 14.05 of the Pleasant Hill Municipal Code. Construction would also be required to meet CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. In addition, the Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply; this help prevent loss of structures or life by reducing access limitations for purposes of accessing and suppressing wildfire locations. Furthermore, the Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards.

Section 3.13, *Utilities and Service Systems*, discusses the Urban Water Management Plans for both CCWD and EBMUD and determined that there are sufficient water supplies to accommodate the anticipated population growth throughout their respective service areas according to ABAG Plan Bay Area 2040 projections. In addition, the General Plan area is located in urbanized parts of both the CCWD and EBMUD service areas. As discussed under Impact UTIL-2, there would be sufficient water supplies available to serve the 2040 General Plan and reasonably foreseeable future development during normal, dry, and multiple dry years. In compliance with the California Fire Code, Part 9 of the California Building Standards Code (CBC), development facilitated under both plans would follow standards for fire safety such as fire flow requirements for buildings, fire hydrant location, and distribution criteria. Additionally, the 2040 General Plan Safety Element includes proposed Policy PFS-1.6 that requires coordination with water providers to maintain adequate water supply for the community. Other impacts related to wildfire that would result from specific project development characteristics would be considered when the City reviews those specific development proposals.

In addition, compliance with the following 2040 General Plan Hazards and Safety Element policies would also help reduce potential wildfire risk to people and structures and wildfire exacerbation:

- Goal HS-3 Minimize the threat to people, property, and the environment from fire hazards.
 - **HS-3.1** Fire Protection District Enhancement. Enhance the ability of the Contra Costa County Fire Protection District to respond to and suppress fires.
 - **HS-3.2** Weed abatement and Fire-Resistant Landscaping. Require annual weed and other fuel abatement and promote the installation of fire-resistant landscaping in new and existing development.

⁴⁵ For purposes of this EIR analysis, "near" is defined as within two miles.

- **HS-3.3 Homeowner Education.** Educate homeowners of defensible space requirements and recommendations per Cal Fire, including programs to aid in removal of excess vegetation and improve home wildfire resiliency.
- **HS-3.4 Fire Safety Improvements.** Develop guidelines for fire safety improvements for existing and new commercial buildings and encourage upgrades where possible.
- **HS-3.5 Defensible Space Inspections.** Coordinate with the Contra Costa County Fire Protection District to require annual home and business inspections to ensure proper defensible space is maintained at properties near grasslands and very high wildfire hazard severity zones.
- **HS-3.6** Interjurisdictional Coordination. Coordinate with the Contra Costa County Fire Protection District, East Bay Regional Park Fire Department, and other neighboring fire departments to reduce fire hazards and promote fire safety in and around Pleasant Hill.
- HS-3.7 Contra Costa County Hazard Mitigation Plan. Ensure the Contra Costa County Hazard Mitigation Plan as it applies to Pleasant Hill is up to date with changes in State hazard legislation and lessons learned from recent wildfire related disasters.
- **HS-3.9 Weed and Fuel Abatement.** Coordinate with landowners to ensure that weed and other fuel abatement occurs in an effective and timely manner.
- **HS-3.10 Municipal Code Maintenance.** Ensure the Pleasant Hill Municipal Code is kept up to date on State and Federal requirements, best practices, and City processes regarding wildfire prevention design standards and requirements.

Nonetheless, given that the General Plan area and adjacent areas have some areas of steep terrain surrounded by or containing vegetation and that proposed plan could result in additional aboveground electrical lines to serve increased development, development facilitated by the 2040 General Plan could be prone to and exacerbate wildfires. And with California experiencing severe drought, the open space areas in and adjacent to Pleasant Hill can experience higher fuel loads in the form of dry vegetation, and higher fuel loads combined with winds could result in the spread of wildfire to proximate development within the General Plan area. Existing codes and regulations cannot guarantee that wildfires would not occur or damage structures and harm occupants. This represents a significant wildfire exposure and exacerbation risk impact. With implementation of Mitigation Measures HAZ-1, HAZ-2, and HAZ-3, the risk of loss of structures and the risk of injury or death due to wildfires would be reduced. These measures would make structures more fire resistant and less vulnerable to loss in the event of a wildfire as well as reduce the potential for construction to inadvertently ignite a wildfire. However, even with mitigation, it is not possible to prevent a significant risk of wildfires or fully protect people and structures from the risks of wildfires. Therefore, the 2040 General Plan operational impact related to wildfire exposure and exacerbation risk would be significant and unavoidable.

Mitigation Measures

MITIGATION MEASURE HAZ-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY FOR CONSTRUCTION WILDFIRE RISK REDUCTION

The City shall include a new 2040 General Plan Hazards and Safety Element policy as follows:

The City shall require the following measures during project construction:

- 1. Construction activities with potential to ignite wildfires shall be prohibited during red-flag warnings issued by the National Weather Service for the site. Example activities include welding and grinding outside of enclosed buildings.
- 2. Fire extinguishers shall be available onsite during project construction. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.
- 3. Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance.

At the City's discretion, additional wildfire risk reduction requirements may be required during construction. The City shall review and approve the project-specific methods to be employed prior to building permit approval.

MITIGATION MEASURE HAZ-: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY FOR PROJECT DESIGN WILDFIRE RISK REDUCTION

The City shall include a new 2040 General Plan Hazards and Safety Element policy as follows:

Project landscape plans (as made available when project applications are submitted) shall include fire-resistant vegetation native to Contra Costa County and/or the local microclimate of the site and prohibit the use of fire-prone species especially non-native, invasive species. If the project site is within a known landslide area (see Figure 3.5-5 in Section 3.5, *Geology, Soils, and Mineral Resources*), the site shall be subject to geotechnical review regarding potential post-fire slope instability. Structural engineering features incorporated into the design of a structure to reduce the risk of damage to the structure from post-fire slope instability shall be recommended by a qualified engineer and approved by the City prior to the building permit approval.

MITIGATION MEASURE HAZ-3: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO CONDUCT PROJECT DESIGN REVIEW FOR WILDFIRE RISK REDUCTION

The City shall include a new 2040 General Plan Hazards and Safety Element policy as follows:

Project landscape plans shall include fire-resistant vegetation native to Contra Costa County and/or the local microclimate of the site and prohibit the use of fire-prone species especially non-native, invasive species. If the project site is within a known landslide area, the site shall be subject to geotechnical review regarding potential post-fire slope instability. Structural engineering features incorporated into the design of the structure to reduce the risk of damage to the structure from post-fire slope instability shall be recommended by a qualified engineer and approved by the City prior to the building permit approval.

Level of Significance

Significant and unavoidable

3.7.5 Cumulative Impacts

The geographic scope of the cumulative hazards, hazardous materials, and wildfire analysis is the General Plan area and the vicinity of the plan area. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Pleasant Hill and surrounding areas in addition to the proposed plan.

Hazardous Materials Exposure Risk

In general, exposure to hazardous materials may cause localized adverse effects. A combination of federal, State, and local regulations limit or minimize the potential for exposure to hazardous materials. Cumulative plans and projects listed in Table 3-1 consist predominantly of general plan buildouts, area plan buildout, and active transportation projects. The types and sizes of development anticipated in the City of Pleasant Hill would not involve large quantities of hazardous materials or activities that transport or handle hazardous materials nor be sited on known hazardous materials sites. In addition, there are no land uses in the vicinity of the plan area that are known to utilize large quantities of hazardous materials or involve hazardous activities. However, cumulative plans and projects may include demolition of structures that have the potential to contain hazardous building materials. Building materials may contain asbestos and lead-based paint. To address potential release of hazardous materials, the City would require applicants to assess structures and impose standard mitigation (required testing, removal, and proper disposal) to minimize release prior to any demolition. Therefore, there would be a less than significant cumulative impact associated with hazardous materials exposure risk.

Emergency Response/Evacuation Plans Consistency

As part of project approval for the cumulative projects, the City would assess the need for fire protection services, which would inform efforts to improve or expand needed facilities. Cumulative development would comply with emergency access requirements as directed by respective city and fire department regulations. The cumulative projects would not result in permanent road closures, nor impede an established emergency or evacuation access route, such as I-680 and SR-24, or interfere with emergency response requirements established by the respective city general plans. However, as described under Impact HAZ-4, the proposed plan would result in significant and unavoidable impacts related to emergency response and evacuation plans consistency. No feasible mitigation is available at the plan level. Therefore, the cumulative impact related to emergency response and evacuation plans consistency is significant and unavoidable.

Wildfire Exposure and Exacerbation Risk

A combination of federal, State, and local regulations limit or minimize the potential for exposure to wildfires by reducing the amount of development in wildland urban interface areas, ensuring new development is developed according to California Building Code and California Fire Code, and incorporating requirements for fire-safe construction into the land use planning. The types and sizes of cumulative development may be located in designated High Fire Hazard Zones. Plans and projects would be located in areas that are already developed, do not contain significant levels of dry fuel susceptible to ignition, or significantly high average wind speed. Furthermore, cumulative plans and projects would result in predominantly in-fill development and not significantly increase emergency services beyond existing service areas. Cumulative project construction would adhere to respective city building codes designed to minimize potential for uncontrolled fires. Adherence to respective

city building codes would ensure that California Fire Code standards including automatic sprinkler systems are included. However, as described under Impact HAZ-5, the proposed plan would result in significant and unavoidable impacts related to the exposure of people and structures to wildfire exposure and exacerbation risks. Mitigation Measures HAZ-1, HAZ-3, and HAZ-3 would make structures more fire resistant and less vulnerable to loss in the event of a wildfire and reduce the potential for construction to inadvertently ignite a wildfire. With mitigation, it is still not possible to prevent significant risk of wildfires or fully protect people and structures from the risks of wildfires. Therefore, the cumulative impact related to wildfire exposure risk is significant and unavoidable.

Aviation-related Hazards and Excessive Noise Exposure

Compliance with development standards as set forth by the Contra Costa County ALUCP regarding types of development allowed and maximum stories allowed would reduce potential cumulative projects impacts related to aviation related hazards. Existing requirements for airports and proposed 2040 General Plan policies HS-6.1 and HS-6.2 would also reduce the noise impacts of airport activity on residents and workers in the plan area. Therefore, the cumulative impact related to aviation-related hazards and excessive noise exposure would be less than significant.

Overall Level of Cumulative Significance

Significant and unavoidable

Pleasant Hill 2040 General Plan	
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City of Pleasant Hill

3.8 Hydrology and Water Quality

3.8.1 Introduction

This section describes the existing hydrology and water quality setting in the region and General Plan area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to hydrology and water quality that could result from implementation of the proposed 2040 General Plan. The information in this section is based on the existing (2003) Pleasant Hill General Plan and EIR, Contra Costa Water District (CCWD) 2020 Urban Water Management Plan (UWMP), San Francisco Bay Basin Regional Water Quality Control Board (SFBRWQCB) Water Quality Control Plan (Basin Plan), Contra Costa Clean Water Program Stormwater Resource Plan, and City of Pleasant Hill National Pollutant Discharge Elimination System (NPDES) permit and associated Stormwater Pollution Prevention Plan (SWPPP).

3.8.2 Environmental Setting

Surface Water Hydrology and Drainage

Surface water "hydrology" refers to how water moves across the surface of land, whereas "stormwater" refers to surface flows that occur in response to storm events. In the General Plan area, surface water hydrology is defined by existing development and stormwater management, which is provided through operation and maintenance of the existing stormwater drainage system, comprised of drainage control improvements including but not limited to pipes, culverts, and storage tanks of the stormwater management system.

Walnut Creek Watershed

The Contra Costa Clean Water Program (CCCWP) designates watersheds within Contra Costa County. According to the CCCWP, the General Plan area is located within the Walnut Creek Watershed, which is composed of the following sub-watersheds: Grayson-Murderers, Concord, Pine-Galindo, San Ramon, and Las Trampas. The overarching Walnut Creek Watershed and its tributaries encompass 93,556 acres in Central Contra Costa County. All tributaries within the Walnut Creek Watershed eventually drain into Suisun Bay and ultimately to the Pacific Ocean. ⁵

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan area) is located within the Walnut Creek Watershed. Figure 3.8-1, *Surface Water*, shows the boundaries of the General Plan area and the Walnut Creek Watershed, as well as four sub-watersheds contained within Walnut Creek Watershed. The General Plan area is located within the Walnut Creek-Frontal Suisun Bay Estuaries sub-watershed, based upon 2022 data

¹ CCWD. 2021. 2020 Urban Water Management Plan. June. https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF (accessed October 19, 2022).

² SFBRWQCB. 2019. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). November 5. Available:

https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#basinplan (accessed October 19, 2022).

³ Contra Costa County. 2019. Contra Costa Watersheds Stormwater Resource Plan. January. Available:

https://www.cccleanwater.org/userfiles/kcfinder/files/SWRP%20Final%2020190124%20Part%201.pdf (accessed October 19, 2022).

⁴ Pleasant Hill, City of. 2021. Pleasant Hill Fiscal Year 20-21 Annual Report. NPDES Permit Number CAS612008 issued SFBRWQCB. Available: https://www.cccleanwater.org/userfiles/kcfinder/files/Pleasant%20Hill%20AR%20FY%2020-21-Complete.pdf (accessed October 19, 2022).

⁵ Contra Costa County Community Development Department and Public Works Department. 2003. Contra Costa County Watershed Atlas. Available: https://www.cccleanwater.org/userfiles/kcfinder/files/Watershed%20Atlas.pdf (accessed October 18, 2022). blid.

from the Geological Survey National Hydrography Dataset. This data differs from that used in the 2003 *Contra Costa County Watershed Atlas.* ⁶ which informed analysis in the 2003 General Plan EIR as well as the Pleasant Hill 2019 *Existing Conditions and Trends Workbook.* ⁷ The 2003 data showed five sub-watersheds (not four), and identified the Walnut Creek-Frontal Suisun Bay Estuaries sub-watershed as the Grayson-Murderers sub-watershed. The boundaries of the overall Walnut Creek Watershed do not change between the two datasets, nor do the boundary or naming differences alter the hydrology and water quality existing conditions. For the purposes of this discussion and as shown on Figure 3.8-1, the current (2022) data and terminology is used.

Tributaries within the Walnut Creek Watershed, including its sub-watersheds, eventually drain into Suisun Bay and ultimately to the Pacific Ocean. Draining the west side of Mount Diablo and the east side of the East Bay Hills, major tributaries of the Walnut Creek Watershed include San Ramon Creek (18.89 miles), Bollinger Creek (6.72 miles), Las Trampas Creek (12.37 miles), Lafayette Creek (3.78 miles), Grayson Creek (8.87 miles), Murderer's Creek (4.37 miles), Pine Creek (12.65 miles) and Galindo Creek (6.5 miles). The primary surface water features within the Walnut Creek-Frontal Suisun Bay Estuaries sub-watershed are Grayson Creek and Murderers Creek.

The major waterways in Pleasant Hill are Grayson Creek and Contra Costa Canal. Both waterways are largely paved and channelized, but still provide some habitat in the channel bottoms (see Section 3.3, *Biological, Agriculture, and Forestry Resources*, for discussion of habitat and vegetation). Existing development throughout the General Plan area is characterized by extensive impervious surfaces such as concrete, asphalt, and structures, as well as the drainage control features implemented to accommodate existing development. An extensive stormwater drainage system is maintained throughout the General Plan area, rerouting surface waters that once meandered across the valley.⁹

Stormwater drainage facilities are included in public utilities and services provided for under the Growth Management Element of the existing (2003) Pleasant Hill General Plan. In 2002, the City developed a plan to manage stormwater and control flooding while protecting the existing positive attributes of the natural systems that exist, therefore protecting the quality of the water and the perceived quality of life. ¹⁰ The stormwater drainage system is comprised of sewers, ditches, and drainage channels that wind through the City, providing the essential service of collecting stormwater runoff and ultimately conveying it to major streams for further conveyance and ultimate discharge to Suisun Bay. Stormwater drainage facilities are maintained by the City, and best management practices (BMPs) are installed on a project-specific basis to provide adequate drainage within and from individual project sites, and to avoid straining the Citywide drainage facilities consisting primarily of pipes, catch basins, pump stations, and manholes, as well as developed and undeveloped surface drainages (creeks and ditches) that route surface water runoff through the Pleasant Hill northward to the Suisun Bay.

⁶ Ibid.

⁷ Pleasant Hill, City of. 2019. Existing Conditions and Trends Workbook – Pleasant Hill 2040 General Plan. August.

⁸ Contra Costa County. 2018. Contra Costa County Hazard Mitigation Plan. Volume 1 – Planning Area-Wide Elements. January. Available: https://www.contracosta.ca.gov/DocumentCenter/View/48893/Contra-Costa-County-Draft-Local-Hazard-Mitigation-Plan-Volume-1-January-31-2018?bidld= (accessed October 18, 2022).

⁹ Contra Costa County Community Development Department and Public Works Department. 2003. Contra Costa County Watershed Atlas. ¹⁰ Pleasant Hill, City of. 2003. City of Pleasant Hill Comprehensive Plan. Appendix A: Stormwater Master Plan. Available: https://www.pleasanthill.com/files/documents/AppendixA-StormwaterMasterPlan1307104904040315AM.PDF (accessed December 9, 2022).

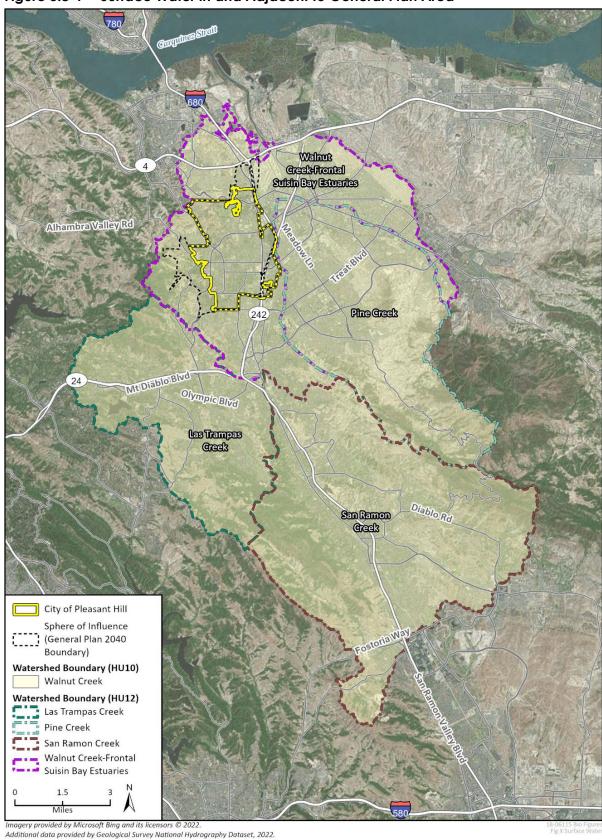


Figure 3.8-1 Surface Water in and Adjacent to General Plan Area

Stormwater runoff in this area generally drains towards Suisun Bay, away from hills located in the west-northwest portion of the General Plan area. As stormwater flows out of the hills in the western portion of Pleasant Hill and onto flatter regions within Pleasant Hill's central and eastern areas, it is conveyed in an existing drainage system comprised of pipelines and limited open ditches or creeks, ultimately discharging to Suisun Bay to the north. Hilly areas consist of more pervious surfaces than more level areas where development is concentrated. Pleasant Hill (i.e., the General Plan area) is primarily developed, which is why surfaces are characterized as predominately impervious surfaces such as concrete, asphalt, and structures. Impervious surfaces are solid and impenetrable by water, meaning that stormwater runoff passes across impervious surfaces rather than filtering through them, such as would occur when surface runoff meets porous soil, or vegetated areas such as lawns and parks. When stormwater runoff moves across impervious surfaces, it gains velocity and volume as the flow progresses and accumulates, resulting in increased potential for erosion and sedimentation to occur. These adverse effects are particularly likely to occur where pervious surfaces are reintroduced, such as where water flowing across a paved area meets sand or soil where the pavement ends. Such effects can degrade downstream water quality, and cause soil stability issues associated with erosion.

Within the General Plan area, the extent of pervious surfaces varies depending upon the development type present. Within fully developed areas, as much as 100 percent of the ground surface in impervious, whereas in parks, designated open space areas, hillsides, and residential backyards, the ground surfaces are predominately permeable. As noted, the General Plan area is predominately characterized by development and impervious surfaces.

The San Francisco Bay RWQCB administers the NPDES stormwater permitting program and regulates stormwater in the San Francisco Bay region. The City of Pleasant Hill is a permittee under the Phase II NPDES Municipal Stormwater Permit. The Pleasant Hill Clean Water Program implements the City of Pleasant Hill-specific components of the CCCWP. In addition, the City maintains storm drainpipes and catch basins.

Surface Water Quality

Pleasant Hill is located within the Suisun Basin under the jurisdiction of the San Francisco Bay Basin (Region 2) Regional Water Quality Control Board (RWQCB), which manages beneficial uses and quality objectives, as well as strategies for achieving these objectives, in accordance with the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin. ¹¹ In addition, the San Francisco Bay RWQCB administers the NPDES stormwater permitting program and regulates stormwater in the San Francisco Bay Basin.

The City of Pleasant Hill is a permittee under the Phase II NPDES Municipal Stormwater Permit, discussed in detail in Section 3.8.3, *Regulatory Framework*, under "Clean Water Act"). The Pleasant Hill Clean Water Program implements the City of Pleasant Hill-specific components of the Contra Costa Clean Water Program (CCCWP). This includes implementation of a SWPPP with best management practices (BMPs) to control stormwater flows and minimize or avoid adverse water quality impacts. ¹²

¹¹ SFBRWQCB. 2019. San Francisco Bay Basin (Region 2) Water Quality Control Plan. November 5. Available: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#basinplan (accessed October 19, 2022).

¹² Pleasant Hill, City of. 2021. Pleasant Hill Fiscal Year 20-21 Annual Report. NPDES Permit Number CAS612008 issued by the SFBRWQCB. Available: https://www.cccleanwater.org/userfiles/kcfinder/files/Pleasant%20Hill%20AR%20FY%2020-21-Complete.pdf (accessed October 19, 2022).

As described in the CCCWP's Contra Costa Watersheds Stormwater Resource Plan, runoff from watersheds in Contra Costa County carries pollutants associated with urban development, industrialization, agriculture, and atmospheric deposition to local water bodies including the San Francisco Bay and the Sacramento-San Joaquin Delta. Regional urbanization has led to the modification of natural watershed processes, resulting in stormwater arriving at creeks in greater volumes and more quickly than in unaltered watersheds.¹³

Increased runoff rates and volumes are capable of more effectively mobilizing and carrying pollutants to storm drainage networks and eventually to receiving waters; additionally, there is a strong relationship between urban watershed sediment yields and loading of contaminants to local water bodies, such as mercury, trace metals, PCBs, polycyclic aromatic hydrocarbons (PAHs), and chlorinated pesticides. ¹⁴

Groundwater Basin Hydrology

Ygnacio Valley Groundwater Basin

The Ygnacio Valley Groundwater Basin extends for approximately 15,469 acres (24.2 square miles) of surface area. This Basin is bounded by Suisun Bay to the north, by Highway 680 and Taylor Road to the west, by the Concord Fault to the east, separating this basin from the Clayton Valley Groundwater Basin, and by the City of Walnut Creek to the south. Walnut Creek and Grayson Creek flow through the Basin before draining into Pacheco Creek, then to the Suisun Bay; the Contra Costa Canal and Mokelumne Aqueduct also pass through the Basin. The Basin occupies a structural depression between the Berkeley Hills and the Mt. Diablo Range. Thick alluvial deposits that cover a faulted and folded complex of consolidated Cretaceous and Tertiary rocks underlie the basin. Water bearing units in the basin consist of Quaternary Alluvium and Alluvial valley fill deposits; the combined thickness of these deposits is more than 700 feet. Aquifers in the basin area are hydrologically connected to the Sacramento River; however, there are limited data regarding the occurrence and movement of groundwater in the basin.¹⁵

The Ignacio Valley Groundwater Basin is designated by DWR as Very Low Priority. ¹⁶ The Sustainable Groundwater Management Act (SGMA) requires High and Medium Priority groundwater basins are managed in accordance with a Groundwater Sustainability Plan (GSP) or GSP Alternative under the direction of a designated Groundwater Sustainability Agency (GSA); SGMA does not yet require Low or Very Low Priority basins to be managed under a GSP, because they are not affected by overdraft. As a Very Low Priority basin, a GSP is not necessary for the Ignacio Valley Groundwater Basin. According to SGMA's 2019 Basin Prioritization, groundwater accounts for only four percent of the Ygnacio Valley Groundwater Basin's water supply, totaling 778 acre-feet per year (AFY). ¹⁷

¹³ Contra Costa County. 2019. Contra Costa Watersheds Stormwater Resource Plan. January. Available: https://www.cccleanwater.org/userfiles/kcfinder/files/SWRP%20Final%2020190124%20Part%201.pdf (accessed October 19, 2022).

nttps://www.cccleanwater.org/usernies/kcrinder/files/SWRP%20Final%2020190124%20Part%201.pdf (accessed October 19, 2022)

14 lbid.

¹⁵ DWR. 2004. California's Groundwater Bulletin 118. San Francisco Bay Hydrologic Region – Ygnacio Valley Groundwater Basin. Updated February 27. Available: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_006_YgnacioValley.pdf (accessed October 19, 2022).

¹⁶ CCWD. 2021. 2020 Urban Water Management Plan. June. Available: https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF (accessed October 19, 2022).

¹⁷ SWRCB. 2021. Clayton, Ygnacio, and Arroyo del Hambre Valley Groundwater Subbasins (2-5, 2-6, and 2-31). Updated September 14. Available:

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/groundwater/BasinLinks/Ygnacio_Clayton_Arroyo.pdf (accessed October 19, 2022).

The Ygnacio Valley Groundwater Basin is one over several located within the service area of the CCWD, along with the Clayton Valley, Pittsburg Plain, and East Contra Costa Groundwater Basin; however, CCWD does not manage groundwater, nor does it use groundwater to meet any demands. While CCWD has partnered with other local agencies to develop a GSP for the East Contra Costa Groundwater Basin, including the Cities of Antioch and Brentwood, Byron-Bethany Irrigation District, Contra Costa County, Diablo Water District, East Contra Costa Irrigation District, and Discovery Bay Community Services District, no GSA formation or GSP development is necessary for the Ygnacio Valley Groundwater Basin. ¹⁸

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan area) overlies the Ygnacio Valley Groundwater Basin, as shown on Figure 3.8-2. Groundwater is known to be present in domestic wells at an average of approximately 194 feet below ground surface (bgs), based upon 11 wells, and in irrigation wells at approximately 155 feet bgs¹⁹. No monitoring wells have been reported within the City of Pleasant Hill; however, the average depths reported by the DWR are considered representative for the Ygnacio Valley Groundwater Basin at large.

Groundwater Water Quality

There is no historic DWR data for the Ygnacio Valley Groundwater Basin; however, according to the SGMA 2019 Basin Prioritization, the groundwater basin may be impacted by saltwater intrusion.²⁰

Flood Hazard Areas

Contra Costa County

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer is a geospatial database that contains current effective flood hazard data. Special Flood Hazard Areas are defined to show the extent of flood waters that will occur in response to the magnitude flood that has a one percent chance of occurring in any given year; this is also commonly referred to as the 100-year floodplain or 100-year Flood Hazard Area. FEMA has produced Flood Insurance Rate Maps (FIRMs) covering Contra Costa County, which define the 100-year Flood Hazard Areas for insurance purposes, and to guide land use planning to consider public and property safety as related to the potential for damage from flood events. The DWR Division of Safety of Dams (DSOD) regulates dam safety, and evaluated risks associated with potential for inundation resulting from dam failure. The State of California Office of Emergency Services (Cal OES) has produced inundation maps and emergency plans covering various scenarios of dam failure, and Contra Costa County Department of Conservation and Development has created dam inundation maps for the County using OES data.

¹⁸ Ibid.

¹⁹ DWR. 2004. California Groundwater Bulletin 118. San Francisco Bay Hydrologic Region – Ygnacio Valley Groundwater Basin. Updated February 27, 2004. Available: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_006_YgnacioValley.pdf (accessed December 8, 2022).
²⁰ Ibid.

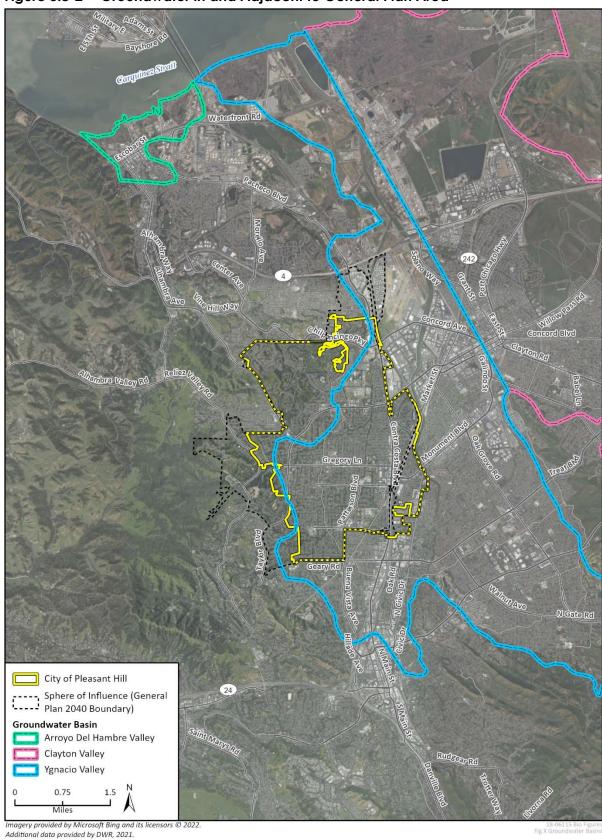


Figure 3.8-2 Groundwater in and Adjacent to General Plan Area

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan area) is primarily susceptible to flooding along its eastern border, although localized flooding may occur in other areas. As shown on Figure 3.8-3, there are two classified flood zones within Pleasant Hill, a 100-year floodplain and 500-year floodplain. Areas within a 100-year floodplain have a one percent chance each year of flooding, while areas in a 500-year floodplain have a two-tenths percent chance each year of flooding. The 500-year floodplain extends the length of Grayson Creek from the northeastern edge of Pleasant Hill to the southeastern limits. Moderately heavy rainfall results in flooding between the east fork of Grayson Creek and Murderer's Creek, and higher intensity storms add flood potential near the confluence of Mangini Creek and the west fork of Grayson Creek. Higher intensity storms add flood potential near the confluence of Mangini Creek and the West Fork of Grayson Creek. During 50-year and stronger storms, shallow flooding can also occur between Grayson Creek and Contra Costa Boulevard, and along Walnut Creek in the Sherman Acres and Fair Oaks neighborhoods east of Interstate 680. Storm waters tend to spill over channels or banks and then flow along streets and across developed property. 22

The Cal OES inundation maps indicate that Pleasant Hill is not located within the inundation area of any dams.²³ The General Plan area is not located within a Tsunami Hazard Area, as mapped by the California Department of Conservation.²⁴ No enclosed surface water bodies are located in the General Plan area.

²¹ Pleasant Hill, City of. 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook. August.

²² Pleasant Hill, City of. 2003. Pleasant Hill General Plan 2003. Adopted July 21.

²³ Contra Costa County. 2018. Contra Costa County Hazard Mitigation Plan. Volume 1 – Planning Area-Wide Elements. January. Available: https://www.contracosta.ca.gov/DocumentCenter/View/48893/Contra-Costa-County-Draft-Local-Hazard-Mitigation-Plan-Volume-1-January-31-2018?bidId= (accessed October 18, 2022).

²⁴ California Department of Conservation. 2022. CGS Information Warehouse: Tsunami Hazard Area Map. Contra Costa County Tsunami Hazard Areas [map viewer]. Available: https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/?extent=-13629548.6026%2C4557227.2116%2C-

^{13597827.2359%2}C4592235.3706%2C102100&utm_source=cgs+active&utm_content=contracosta (accessed October 20, 2022).

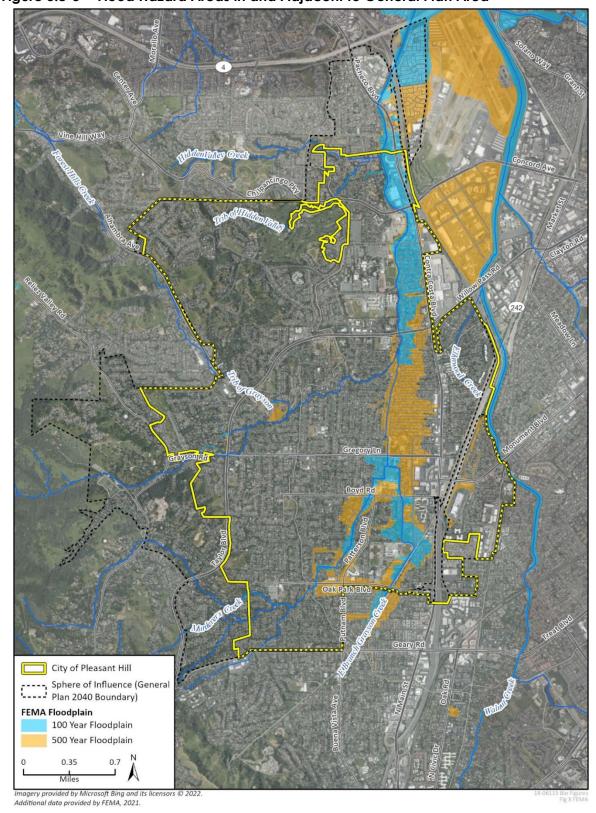


Figure 3.8-3 Flood Hazard Areas in and Adjacent to General Plan Area

3.8.3 Regulatory Framework

Federal

Clean Water Act

The United States Army Corp of Engineers (USACE) regulates discharge of dredge or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharges of fill material" is defined as the addition of fill material into waters of the United States, including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines (33 CFR § 328.2(f)). In addition, Section 401 of the CWA (33 United States Code [USC] 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable state water quality standards.

The federal government also supports a policy of minimizing the destruction, loss, or degradation of wetlands. Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. The USACE regulates the discharge of dredged or fill material, including grading, placing of riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining roads and farm/forest roads, and excavating without stockpiling.

In California, the term "waters of the United States," indicates resources that are subject to jurisdiction of the CWA as defined by the 2015 Clean Water Rule:

- All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters, including interstate wetlands;
- (3) The territorial seas;
- (4) All impoundments of waters otherwise identified as waters of the United States under this section;
- (5) All tributaries, of waters identified in paragraphs (1) through (3) of this section;
- (6) All waters adjacent to a water identified in paragraphs (1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;
- (7) Western vernal pools, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (1) through (3). Vernal pool identified in this paragraph shall not be combined with waters identified in paragraph (6) when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (6), they are an adjacent water and no case-specific significant nexus analysis is required.

SECTION 404—DISCHARGE OF DREDGE AND FILL OF WATERS OF THE UNITED STATES PERMIT

Section 404 of the CWA regulates temporary and permanent fill and disturbance of wetlands and waters of the United States. Under Section 404, the discharge (temporary or permanent) of dredged or fill material into waters of the United States, including wetlands, typically must be authorized by the USACE through either the Nationwide Permit (general categories of discharges with minimal effects) or an Individual Section 404 Permit.

Wetlands are a subset of waters of the United States and receive protection under Section 404 of the CWA. The federal definition of wetlands is the following:

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

The Section 404(b)(1) Guidelines regarding the implantation of Section 404 of the CWA mandate that filling wetlands be avoided unless it can be demonstrated that the project is the least environmentally damaging practicable alternative. The USACE has primary federal responsibility for administering regulations that concern waters and wetlands.

SECTION 303—WATER QUALITY STANDARDS AND TOTAL MAXIMUM DAILY LOADS

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body's designated beneficial use. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards.

CWA Section 303(d) requires States and authorized Native American tribes to develop a list of water quality impaired segments of waterways. The list includes waters that do not meet water quality standards necessary to support a waterway's beneficial uses even after the minimum required levels of pollution control technology have been installed. Listed water bodies are to be priority ranked for development of a Total Maximum Daily Load (TMDL). A TMDL is a calculation of the total maximum daily load (amount) of a pollutant that a water body can receive on a daily basis and still safely meet water quality standards. The TMDLs include waste load allocations for urban stormwater runoff as well as municipal and industrial wastewater discharges, with allocations apportioned for individual Municipal Separate Storm Sewer Systems (MS4s) and wastewater treatment plants. For stormwater, load reductions would be required to meet the TMDL waste load allocations within the 20 years required by the TMDLs.

The Environmental Protection Agency (EPA), SWRCB, and RWQCBs are responsible for establishing TMDL waste load allocations and incorporating approved TMDLs into water quality control plans, NPDES permits, and Waste Discharge Requirements (WDRs) in accordance with a specified schedule for completion. The San Francisco Bay RWQCB adopted TMDLs that apply to the City of Pleasant Hill.

SECTION 401—WATER QUALITY CERTIFICATION

Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Under CWA Section 401, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certification from the appropriate

agency stating that the discharge is consistent with the State's water quality standards and criteria. In California, the SWRCB delegates authority to the RWQCBs, to grant water quality certification or waive the requirements. Pleasant Hill is located within the SFBRWQCB jurisdiction.

SECTION 402—NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT

The RWQCBs administer the NPDES stormwater permitting program, under Section 402(d) of the federal CWA, on behalf of the EPA. The objective of the NPDES program is to control and reduce levels of pollutants in water bodies from discharges of municipal and industrial wastewater and stormwater runoff. CWA Section 402(d) establishes a framework for regulating nonpoint-source stormwater discharges (33 USC 1251). Under the CWA, discharges of pollutants to receiving water are prohibited unless the discharge complies with an NPDES permit. The NPDES permit specifies discharge prohibitions, effluent limitations, and other provisions, such as monitoring deemed necessary to protect water quality based on criteria specified in the National Toxics Rule, the California Toxics Rule, and the basin plan.

National Flood Insurance Program

FEMA oversees floodplains and administers the National Flood Insurance Program (NFIP) under the National Flood Insurance Act of 1968. The NFIP makes federally subsidized flood insurance available to property owners within communities who participate in the program. FEMA defines areas of special flood hazard, or "Flood Hazard Areas," as those areas that are subject to inundation by a 100-year flood event, or the magnitude flood with a one percent chance to occur in any given year, or approximately once every 100 years. Flood Hazard Areas are defined on regulatory flood maps titled Flood Insurance Rate Maps (FIRMs). The NFIP mandates that development cannot occur within a Flood Hazard Area if it would result in more than a one-foot increase in flood elevation. In addition, development is not allowed in delineated floodways within the regulatory floodplain.

National Pollutant Discharge Elimination Program

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in the City of Pleasant Hill are regulated under the San Francisco Bay Region Municipal Regional Stormwater Issuing Waste Discharge Requirements and NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, adopted October 14, 2009, and revised November 19, 2015.

The City of Pleasant Hill is a member agency of the CCCWP, which assists municipalities and other agencies in Contra Costa County with implementation of the NPDES Permit (the CCCWP is introduced in Section 3.8.2, *Environmental Setting*, under "Surface Water Quality"). NPDES Provision C.3 addresses post-construction stormwater management requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area. Provision C.3 requires the incorporation of site design, source control, and stormwater treatment measures into development projects in order to minimize the discharge of pollutants in stormwater runoff and non-stormwater discharges and to prevent increases in runoff flows. Low Impact Development (LID) methods are to be the primary mechanism for implementing such controls.

²⁵ Contra Costa County et al. 2022. Contra Costa Clean Water Program – Stormwater C.3 Guidebook, 8th Edition. Stormwater Quality Requirements for Development Applications. December 23.

https://www.cccleanwater.org/userfiles/kcfinder/files/2022_1223_HAI_StormwaterGuidebook_8th_Edition_FINAL%281%29.pdf (accessed January 16, 2023).

NPDES Provision C.3(g) pertains to hydromodification management requirements. This NPDES Permit provision requires five Control Design Criteria to be implemented: range of flows to control, goodness of fit criteria, allowable low flow rate, standard hydromodification modeling, and alternate hydromodification modeling and design. As noted above, projects disturbing more than one acre of land during construction are required to comply with the NPDES Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 (Construction General Permit). The RWQCB regulates Construction General Permit activities at a local level.

To obtain coverage under the Construction General Permit, a project applicant must provide a Notice of Intent, a SWPPP, and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. This permit also covers linear underground and overhead projects such as pipeline installations.

The Construction General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on project location and timing (such as wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to sediment-sensitive receiving water. The determination of the project risk level would be made by project applicants when the Notice of Intent is filed (and more details of the ultimate timing of the construction activity are confirmed).

The performance standard in the Construction General Permit is that dischargers minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and BMPs. A SWPPP must be prepared by a qualified SWPPP developer that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is (1) to help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Operation of BMPs must be overseen by a qualified SWPPP practitioner who meets the requirements outlined in the permit.

National Toxics Rule and California Toxics Rule

In 1992, the EPA promulgated the National Toxics Rule under the CWA to establish numeric criteria for priority toxic pollutants for 14 states to bring all states into compliance with the requirements of CWA Section 303(c)(2)(B). The National Toxics Rule established water quality standards for 42 pollutants not covered under California's Statewide water quality regulations at that time. As a result of the court-ordered revocation of California's Statewide basin plans in September 1994, the EPA initiated efforts to promulgate additional federal water quality standards for California. In May 2000, the EPA issued the California Toxics Rule, which includes all the priority pollutants for which the EPA has issued numeric criteria not included in the National Toxics Rule.

Federal Executive Order 11988

Executive Order 11988, "Floodplain Management," directs all federal agencies to avoid, to the extent possible, long- and short-term adverse impacts of occupancy and modification of floodplains, and to avoid supporting development in a floodplain either directly or indirectly wherever there is a

practicable alternative. Title 23 of the Code of Federal Regulations 650, Subpart A, "Location and Hydraulic Design of Encroachment on Floodplains" specifies applicable floodplain regulations.

FEMA also administers the NFIP, a federal program that enables property owners in participating communities to purchase insurance as protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

State

Porter-Cologne Water Quality Control Act

The State of California is authorized to administer federal or State laws regulating water pollution within the State. The Porter-Cologne Water Quality Control Act ("Porter-Cologne"), contained within the California Water Code §13000, et seq., includes provisions to address requirements of the CWA. These provisions include NPDES permitting, dredge and fill programs, and civil and administrative penalties. Porter-Cologne is broad in scope and addresses issues relating to the conservation, control, and utilization of the water resources of the State. Additionally, it states that the quality of all the waters of the State, including groundwater and surface water, must be protected for the use and enjoyment by the people of the State.

Historically, California relied on its authority under Section 401 of the CWA (see description above) to regulate discharges of dredged or fill material to waters of the United States. Section 401 requires an applicant to obtain "water quality certification" from the SWRCB through its RWQCBs to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill materials (CWA § 404 permits) issued by the USACE. The RWQCB has typically waived WDRs under Porter-Cologne for projects or plans that also required Section 401 certification. Following the U.S. Supreme Court's decision *Rapanos v. United States*, 547 U.S. 715 (2006) which limited the jurisdiction of wetlands under the CWA, the RWQCBs now generally rely on the report of waste discharge process to regulate discharges into waters of the State.

California Code of Regulations (Wetlands and Waters Definition)

The SWRCB indicates that no single accepted definition of wetlands exists at the State level, and that the RWQCBs may have different requirements and levels of analysis with regard to the issuance of water quality certifications. Generally, an area is a wetland if, under normal circumstances:

- (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

Under California State law, waters of the State means "any surface water or groundwater, including saline waters, within the boundaries of the state." As such, water quality laws apply to both surface water and groundwater. After the U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (53 USC 159), the Office of Chief Counsel of the SWRCB released a legal memorandum confirming the State's jurisdiction over isolated wetlands. The memorandum stated that under Porter-Cologne, discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the SWRCB

regulates discharges to isolated waters in much the same way as it does for waters of the United States, using Porter-Cologne rather than CWA authority.

California Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (MWELO), also referenced by Title 24, Part 11, Chapters 4 and 5 CalGreen Building Code, requires that all local agencies adopt, implement, and enforce the MWELO or a local Water Efficient Landscape Ordinance (WELO) that is at least as effective as the MWELO. The purpose of water efficient landscape ordinances is to not only increase water efficiency but to improve environmental conditions in the built environment. Landscaping should be valued beyond the esthetic because landscapes replace habitat lost to development and provide many other related benefits such as improvements to public health and quality of life, climate change mitigation, energy and materials conservation and increased property values. ²⁶

Industrial General Stormwater Permit

The Statewide Stormwater NPDES permit for general industrial activity (Order 2014-0057-DWQ, superseding Order 97-03-DWQ) regulates discharges associated with 10 broad categories of industrial activities, such as operation of wastewater treatment works, and with recycling facilities. The industrial general permit requires the implementation of Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to achieve performance standards. The permit also requires development of a SWPPP that identifies the site-specific sources of pollutants and describes the measures at the facility applied to reduce stormwater pollution. A monitoring plan is also required.

California NPDES Stormwater Permit

In November 1990, the EPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase I of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Phase II of the NPDES stormwater permit regulations, which became effective in March 2003, required that NPDES permits be issued for construction activity for projects disturbing 1–5 acres. Phase II of the municipal permit system (known as the NPDES General Permit for Small MS4s, Order No. 2003-0005-DWQ as amended by 2013-0001-DWQ) required small municipalities of fewer than 100,000 persons to develop stormwater management programs. This permit authorizes discharges of stormwater and some categories of non-stormwater that are not "significant contributors of pollutants."

Provision C.3 in the Municipal Regional Permit requires site designs for new developments and redevelopments to minimize the area of new roofs and paving and treat runoff, and in some cases, control the rates and durations of site runoff. Where feasible, pervious surfaces should be used instead of paving so that runoff can infiltrate to the underlying soil. Runoff should be dispersed to landscaping where possible. Remaining runoff from impervious areas must be treated using bioretention. In some developments, the rates and durations of site runoff must also be controlled.

The C.3 requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction. In addition, project applicants

²⁶ Department of Water Resources (DWR). 2022. Model Water Efficient Landscape Ordinance. https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance (October 26, 2022).

must execute agreements to allow municipalities to verify that stormwater treatment and flow-control facilities that are approved as part of new development are maintained in perpetuity.

California Toxics Rule and State Implementation Policy

The California Toxics Rule, presented in 2000 in response to requirements of EPA's National Toxics Rule, establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The California Toxics Rule criteria are regulatory criteria adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) list for contaminants. The California Toxics Rule includes criteria for the protection of aquatic life and human health. Human health criteria (water- and organism-based) apply to all waters with a Municipal and Domestic Water Supply beneficial use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Policy, was adopted by the SWRCB in 2000. It establishes provisions for translating the California Toxics Rule criteria, National Toxics Rule criteria, and basin plan water quality objectives for toxic pollutants into:

- NPDES permit effluent limits;
- Effluent compliance determinations;
- Monitoring for 2,3,7,8-tcdd (dioxin) and its toxic equivalents;
- Chronic (long-term) toxicity control provisions;
- Site-specific water quality objectives; and
- Granting of effluent compliance exceptions.

The goal of the State Implementation Plan is to establish a standardized approach for permitting discharges of toxic effluent to inland surface waters, enclosed bays, and estuaries.

California Sustainable Groundwater Management Act

In September 2014, California Governor Jerry Brown signed SGMA into law, requiring that California's critical groundwater resources be sustainably managed by local agencies. As introduced in Section 3.8.2, *Environmental Setting*, under "Groundwater Resources," SGMA gives local agencies the power to sustainably manage groundwater and requires GSPs to be developed for Medium- and High-Priority groundwater basins, as defined by the DWR. Since the Ygnacio Valley Groundwater Basin is identified by DWR as being Very Low Priority, it does not require implementation of a GSP for compliance with SGMA.

California Urban Water Management Act

The CCWD maintains a current (2020) UWMP for compliance with the California Urban Water Management Planning Act (UWMP Act), which is required by California Water Code (CWC) Section 10620, for all urban water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 AFY. East Bay Municipal Water District (EBMUD), which serves a portion of the western area of Pleasant Hill, also maintains a current (2020) UWMP.²⁷ Each UWMP identifies and characterizes the agency's planning activities to ensure adequate water supplies to meet existing and future demands for water within their respective service territories, and outlines contingency planning steps to execute during times of actual or anticipated water

²⁷ EBMUD. 2021. Urban Water Management Plan 2020. Available: file:///C:/Users/amescher/Downloads/UWMP-2020-FINAL-bookmarks%20(2).pdf (accessed December 9, 2022).

supply shortages. The 2020 UWMPs include data and projections for water supply and demand, conservation programs, water demand management measures (DMMs) and BMPs, and recycled water opportunities through the year 2045. ^{28,29} In addition, the 2020 UWMPs address requirements of the Water Conservation Bill of 2009, Senate Bill (SB) X7-7, for compliance with per capita water use reduction targets. In addition, the UWMPs address the requirements of Assembly Bill (AB) 1668 and SB 606, with the inclusion of a Drought Risk Assessment and Water Shortage Contingency Plan.

Regional

San Francisco Bay Regional Water Quality Control Plan

The San Francisco Bay RWQCB implements the Basin Plan, a master policy document for managing water quality in the region. The Basin Plan establishes beneficial water uses for waterways and water bodies within the region. The San Francisco Bay RWQCB has jurisdiction over the City of Pleasant Hill. Individual RWQCBs function as the lead agencies responsible for identifying, monitoring, and cleaning up leaking underground storage tanks. Storage of hazardous materials in USTs is regulated by the SWRCB, which oversees all nine of the RWQCBs.

Contra Costa Clean Water Program

The CCCWP (introduced in Section 3.8.2, *Environmental Setting*, under "Surface Water Quality") is within the jurisdiction of the San Francisco Bay RWQCB and Central Valley RWQCB. The CCCWP works to protect local creeks, reservoirs, watersheds, and San Francisco Bay from contamination and pollution required by federal and State clean water regulations.

San Francisco Bay Region Municipal Stormwater Permitting Program

The San Francisco Bay Region Municipal Stormwater NPDES Permit, Order No. R2-2015-0049 (MRP) issues the Waste Discharge Requirements and NPDES Permit for the discharge of stormwater runoff from the municipal separate storm sewer systems (MS4s) of over 70 municipalities, including Pleasant Hill, and local agencies in five Bay Area counties.³⁰ Under the MRP, permittees are prohibited from non-stormwater discharges into storm drain systems and watercourses. Permitted discharges must not cause or contribute to a violation of any applicable water quality standard for receiving waters. Upon a determination by either the MRP permittee(s) or the RWQCB that discharges are causing or contributing to an exceedance of an applicable water quality standards, the permittee(s) must notify, within no more than 30 days, and thereafter submit a report to the RWQCB. The report must describe controls or best management practices (BMPs) that are currently being implemented, and the current level of implementation, and additional controls or BMPs that will be implemented, and/or an increased level of implementation, to prevent or reduce the discharge of pollutants that are causing or contributing to the exceedance of water quality standards. The MRP also sets forth requirements for monitoring water quality. Provision C.3 of the MRP establishes discharge requirements for new development and redevelopment projects. The goal of Provision C.3 is for the MRP permittees to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address stormwater runoff pollutant discharges and prevent

²⁸ Ibid.

²⁹ CCWD. 2021. 2020 Urban Water Management Plan. June. Available: https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF (accessed October 19, 2022).

³⁰ SWRCB. 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf.

increases in runoff flows from new development and redevelopment projects. According to the MRP, this goal is to be accomplished primarily through the implementation of low impact development (LID) techniques.

Local

Pleasant Hill General Plan

The current (2003) Pleasant Hill General Plan contains policies related to Hydrology and Water Quality, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Municipal Code—Flood Damage Prevention

The Pleasant Hill Municipal Code sets forth a code of ordinances associated with hydrology and water quality. Chapter 15.15, *Flood Damage Prevention*, of the Pleasant Hill Municipal Code details measures to prevent and reduce flood damage as well as standards for construction, utilities, subdivisions, and homes. In addition, the City of Pleasant Hill is responsible for ensuring that creeks and drainage channels, including those located on private property, are sufficiently maintained and clear of debris.

Pleasant Hill Clean Water Program

As discussed in Section 3.8.2, *Environmental Setting*, under "Surface Water Quality," as well as in this section under "Federal" and "Clean Water Act" as well as "National Pollutant Discharge Elimination System," the City of Pleasant Hill is a permittee under the Phase II NPDES Municipal Stormwater Permit, and the Pleasant Hill Clean Water Program implements the City of Pleasant Hill-specific components of the CCCWP, including implementation of a SWPPP with BMPs to control stormwater flows and minimize or avoid adverse water quality impacts.³¹

Pleasant Hill Stormwater Runoff Pollution Control Ordinance Code

Chapter 15.05 of the Pleasant Hill Municipal Code addresses stormwater management and runoff. Consistent with Chapter 15.05, every development project must submit a Stormwater Control Plan that meets the criteria of the most recent version of the guidebook to reduce stormwater. The Stormwater Control Plan would outline all stormwater management facilities, how those facilities would be maintained, and the costs to implement the facilities.

3.8.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 *CEQA Guidelines* Appendix G significance criteria questions related to hydrology and water quality.

Would the 2040 General Plan:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

³¹ Pleasant Hill, City of. 2021. Fiscal Year 20-21 Annual Report for the City of Pleasant Hill. NPDES Permit Number CAS612008 issued by the SFBRWQCB. Available: https://www.cccleanwater.org/userfiles/kcfinder/files/Pleasant%20Hill%20AR%20FY%2020-21-Complete.pdf (accessed October 19, 2022).

- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. result in a 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?
 - iv. impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Approach to Analysis

Hydrology and Water Quality

No land use changes would be facilitated by the 2040 General Plan within areas outside of City Limits but within the Sphere of Influence, and thus the following impact discussion focuses on impacts associated with land use changes facilitated by the 2040 General Plan within City Limits.

Impacts related to hydrology and water quality were determined by comparing the activities and future built conditions that would be facilitated by the proposed plan to the existing (baseline) environmental conditions for hydrology and water quality, as characterized above in Section 3.8.2, *Environmental Setting*. As discussed in Chapter 2, *Project Description*, this analysis conservatively assumes that maximum 2040 General Plan buildout conditions for both residential and non-residential uses will be implemented by 2040 within Pleasant Hill. While not likely to occur, maximum buildout represents development of every land parcel within Pleasant Hill in accordance with the proposed land use designation included in the proposed 2040 General Plan. Impact characterizations were informed through review of information regarding regional and local hydrology, climate, topography, and geology contained in the Pleasant Hill 2003 General Plan and Pleasant Hill 2003 General Plan EIR, San Francisco Bay RWQCB Basin Plan, FEMA FIRMs, the proposed 2040 General Plan, and plan-specific features and proposals.

The impact evaluation focuses on effects on surface and groundwater quality, groundwater supply, and drainage (in terms of erosion, siltation, flooding, stormwater system exceedance, and polluted runoff). Water quality conditions are compared with water quality standards and WDRs by identifying potential contaminants and pollution pathways, amount of impervious area, and runoff treatment requirements. Finally, as part of the analysis, inundation and flooding are assessed by reviewing potential inundation zone maps and data relative to development that would be facilitated by the proposed plan.

Topics not covered in the following impact analysis include water supply availability and adequacy of wastewater conveyance and treatment infrastructure, which are discussed in Section 3.13, *Utilities and Service Systems*. In addition, impacts related to wetlands and waters of the United States are discussed in Section 3.3, *Biological, Agriculture, and Forestry Resources*.

EIR Scoping Comments Consideration

This section also addresses written comments received in response to the EIR NOP related to groundwater dynamics, flooding, and stormwater quality, as well as a verbal comment received during the EIR public scoping meeting regarding water quality regulations, soil and groundwater quality, drainage pattern alterations, and flooding risk. Water quality regulations including the Clean Water Act and NPDES program are presented in Section 3.8.3, *Regulatory Framework*, and addressed under Impact HYD-1. Landscape water use efficiency is addressed in Section 3.8.3, and under Impact HYD-2. Groundwater quality is addressed under Impact HYD-1. Stormwater runoff and drainage, and the 50-Year Plan of the Contra Costa County Flood Control and Water Conservation District and the City Public Works Department are discussed in Section 3.8.2, *Environmental Setting*, under "Surface Water Hydrology," as well as under Impact HYD-2 and Impact HYD-3.

Specific Thresholds of Significance

For purposes of the following impact analysis, the following thresholds are used to evaluate the significance of hydrology and water quality impacts resulting from implementation of the 2040 General Plan.

- Violate any water quality standards or waste discharge requirements established by a regulatory body with jurisdiction over the General Plan area.
- Deplete groundwater supplies or interfere with groundwater recharge such that the proposed plan would impede or obstruct goals and policies of a groundwater management plan.
- Alter an existing drainage pattern through alteration of the course of a stream or river or increased impervious surfaces and resulting in erosion, siltation, or flooding on or off-site.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Expose people to pollutants due to inundation related to flooding, tsunami, or seiche.
- Conflict with a water quality control plan or sustainable groundwater management plan such goals would be obstructed.

Impact Evaluation

Surface and Groundwater Quality

Significance Criterion a: Would the proposed plan violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact HYD-1 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD INVOLVE GROUND-DISTURBING ACTIVITIES DURING CONSTRUCTION THAT COULD TEMPORARILY INCREASE THE POTENTIAL FOR WATER QUALITY TO BE AFFECTED BY SEDIMENTATION OR AN ACCIDENTAL SPILL OR RELEASE OF HAZARDOUS MATERIALS. HOWEVER, WITH ADHERENCE TO APPLICABLE WATER QUALITY STANDARDS, WASTE DISCHARGE REQUIREMENTS, AND PROPOSED GENERAL PLAN POLICIES, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction activities would involve ground-disturbing activities, which includes the use of heavy equipment and machinery that could increase the potential for water quality degradation to occur

as a result of soil erosion or sedimentation, or an accidental spill or release of hazardous materials such as oils, fuels, paints, and solvents. Buildout of the 2040 General Plan would emphasize infill and reuse, due to the existing built-up nature of the General Plan area; therefore, construction activities may involve demolition of existing structures, and earth-moving activities to install appropriate foundations, structures, utilities, and associated facilities. Earth-moving activities during construction could include excavation and trenching, soil compaction and moving, cut and fill activities, and grading.

Individual construction activities that disturb one or more acres of land surface would be subject to the NPDES Construction General Permit adopted by the SWRCB and implemented in the General Plan area by the SFBRWQCB. As discussed in Section 3.8.2 under "Surface Water Quality," the City of Pleasant Hill is a permittee under the Phase II NPDES Municipal Stormwater Permit, and the Pleasant Hill Clean Water Program implements the City of Pleasant Hill-specific components of the CCCWP, including a SWPPP with BMPs to control stormwater flows and minimize or avoid adverse water quality impacts. ³² A SWPPP must describe the site and the facility, identify applicable erosion and sediment controls, describe requirements for runoff water quality monitoring and means of waste disposal, as necessary, and identify applicable non-storm water management controls associated with a proposed activity. In addition, inspection of construction sites before and after storms would be required to identify stormwater discharge from construction activity and to ensure that erosion controls are effectively implemented, where necessary. Development facilitated by the proposed plan would be subject to the requirements of the City of Pleasant Hill-specific components of the CCCWP (see discussion in Section 3.8.2 under "Surface Water Quality"), including SWPPP implementation for development facilitated by the 2040 General Plan, would reduce the potential for the proposed plan to cause water quality standards to be exceeded.

Below are goals and policies from the 2040 General Plan that would protect and enhance water quality in the General Plan area; these are from the Public Facilities, Services, and Infrastructure (PFS) Element of the 2040 General Plan, as well as the Environment Element (ENV).

- Goal PFS-2 Ensure that adequate wastewater facilities and services are available to meet the needs of existing and future development.
 - **Policy PFS-3.1 NPDES Permit Activities.** Implement NPDES permit activities in compliance with State and Federal law to prevent stormwater pollution.

This policy reinforces compliance with regulatory requirements and the CCCWP, as discussed above. Other policies under Goal PFS-2 that address stormwater management during operational activities are discussed below under "Operation."

- Goal ENV-3 Preserve and restore streams, wetlands, and riparian areas to function as open space and wildlife corridors.
 - **Policy ENV-3.2** Creek Contamination and Sedimentation Prevention. Require new development to use site preparation, grading, and construction techniques that prevent contamination and sedimentation of creeks and streams.

³² City of Pleasant Hill. 2021. Fiscal Year 20-21 Annual Report for the City of Pleasant Hill. NPDES Permit Number CAS612008 issued by the San Francisco Bay RWQCB. Available: https://www.cccleanwater.org/userfiles/kcfinder/files/Pleasant%20Hill%20AR%20FY%2020-21-Complete.pdf (October 19, 2022).

- **Policy ENV-3.3 Creek Bank Stabilization.** Require new development proposals to include appropriate measures for creek bank stabilization, and any additional steps necessary to reduce erosion and sedimentation but preserve natural creek channels and riparian vegetation.
- **Policy ENV-3.7 Erosion Control Plans.** Require erosion control plans for new development that require significant grading or are near streams, wetlands, and riparian areas. The plans shall include recommendations for grading practices that prevent erosion, loss of topsoil, and scour of drainageways, consistent with biological and aesthetic values.

Policies ENV-3.2 and ENV-3.3 protect water quality during construction by minimizing potential for erosion and sedimentation to occur. Similarly, Policy ENV-3.7 directly addresses erosion during construction, and complements Policy PFS-3.1, as the Erosion Control Plan will include erosion and sediment control BMPs such as those that will also be required by the SWPPP.

During excavation or trenching activities during construction facilitated by the 2040 General Plan, it is possible that shallow, unconfined water could be encountered in the subsurface. The General Plan area is underlain by the Ygnacio Valley Groundwater Basin, and groundwater in this basin is known to exist within 10 to 20 feet of the ground surface. Depending upon the extent of excavation activities associated with proposed development, it is possible that shallow groundwater could be encountered, which may require dewatering of the excavation or trenching site.

Dewatering is conducted to protect the integrity of the work area and the water quality of the surrounding and downstream waterways. Dewatering is a process by which water is removed from the work area, held in storage tanks or trucks, and tested for contamination prior to discharge. If contamination is detected, the water is treated to the extent required for compliance with the Groundwater General Permit (Regional Board Order No. R2-2012-0060), which is part of NPDES permit compliance.³⁴ Once the required water quality conditions are achieved, the water is discharged to an appropriate disposal facility or wastewater treatment plant, consistent with requirements of the Groundwater General Permit. The process of dewatering protects the water quality in underlying groundwater basins, as well as in riparian habitat (wetland) areas that may be hydrologically connected to the underlying groundwater basin. Should dewatering activities be necessary during construction, it is not anticipated that water quality degradation to the underlying groundwater basin or to riparian habitats or wetland areas would occur.

Operation

Potential impacts related to the violation of water quality standards or waste discharge requirements, or the potential for activities to "otherwise substantially degrade water quality," would largely be limited to construction activities. Operation and maintenance activities would not involve the ground-disturbing activities or use of heavy construction equipment and machinery that introduce potential for an accidental spill or release of hazardous materials to occur, or erosion and sedimentation associated with disturbed soils.

³³ DWR. 2020. Groundwater Level Report – Station 379795N1220595W001. Available:

https://wdl.water.ca.gov/GroundwaterBrowseData.aspx?LocalWellNumber=&StationId=27022&StateWellNumber=&SelectedCounties=7 &SiteCode=&SelectedGWBasins=Ygnacio+Valley+(2-006) (accessed October 20, 2022).

³⁴ SFBRWQCB. 2012. NPDES No. CAG912004. Groundwater General Permit Order No. R2-2012-0060. Available:

https://www.waterboards.ca.gov/rwqcb2/water_issues/programs/npdes/R2-2012-0060/Attachment_E.pdf (accessed October 20, 2022)

Operation of development facilitated by the 2040 General Plan would occur in compliance with goals and policies for the protection of surface water and groundwater quality. As mentioned above, those include additional policies under Goal PFS-2, as listed below.

- Policy PFS-3.3 Green Infrastructure. Require new developments to install green infrastructure as required by the permit conditions of the Regional Water Quality Control Board, as part of their natural stormwater drainage systems, including but not limited to pervious pavement, infiltration basins, raingardens, green roofs, rainwater harvesting systems, and other types of low impact development (LID).
- **Policy PFS-3.4** Retrofit for Green Infrastructure. Encourage the retrofit of existing development to include sustainable infrastructure and green building practices.

Policies PFS-3.3 and PFS-3.4 protect water quality by encouraging design features that maximize stormwater infiltration, which reduces the velocity of stormwater runoff, and minimizes potential for the conveyance of contaminants in stormwater runoff. Policy PFS-3.4 could result in increased permeable surfaces in the General Plan area, compared to existing conditions, if existing development characterized by impermeable surfaces is retrofitted with sustainability infrastructure and green building practices under the 2040 General Plan. In addition, below is a goal and policy from the Hazards Safety (HS) Element, as well as another goal and associated policies from the ENV Element, which serve to maximize stormwater infiltration, thereby minimizing potential water quality impacts associated with stormwater runoff.

- Goal HS-5 Minimize the potential for serious flooding and drainage problems including damage to property, loss of life, and economic displacement.
 - **Policy HS-5.6 Low-Impact Development.** Require low-impact development (LID) measures in new development, major remodeling projects, and public projects to limit the amount of impervious surface in new development and to increase retention, treatment, and infiltration of urban stormwater runoff.
- Goal ENV-2 Protect the quality of water resources in Pleasant Hill.
 - **Policy ENV-2.4** Alternative Paving Methods. Encourage alternative materials and designs to limit driveways, parking areas and parking lots citywide, including pervious paving material, turf stones, and "ribbon strip" driveways.
 - Policy ENV-2.5 Alternative Drainage Design. Continue to require bioswales and other innovations in new development to allow runoff from parking lots and all impervious area to drain into landscaped areas and rainwater percolate into the ground.

Policy HS-5.6 compliments Policy PFS-3.3 (presented above), by explicitly applying LID features to new development as well as remodeling and public projects. In addition, Policies ENV-2.4 and ENV-2.5 further complement these policies for LID features by facilitating use of materials and methods that increase infiltration of surface water, thereby reducing water quality impacts from runoff.

The implementation of LID features as part of both new development and retrofitting existing development, as applicable under the 2040 General Plan, could result in increased stormwater infiltration compared to existing conditions and, thus enhance water quality by minimizing the

conveyance of contaminants in stormwater. It would also be in alignment with the County Flood Control and Water Conservation District's 50-Year Plan, which encourages local communities to plan for modifying flood control channels to incorporate natural features.³⁵ With implementation of these 2040 General Plan policies and regionally consistent BMPs for water quality and NPDES compliance, operation would be consistent with water quality standards and waste discharge requirements. Therefore, 2040 General Plan operational impacts related to surface water quality and groundwater quality would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Groundwater Supply and Recharge

Significance Criterion b: Would the proposed plan substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact HYD-2 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT PUMP WATER FROM THE LOCAL GROUNDWATER BASIN AND WOULD NOT INTRODUCE SUBSTANTIAL NEW AREAS OF IMPERMEABLE SURFACES SUCH THAT THE RATES OR PATTERNS OF GROUNDWATER RECHARGE FROM INFILTRATION WOULD BE AFFECTED. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

During construction of individual projects facilitated by the 2040 General Plan, ground-disturbing activities would temporarily alter site-specific drainage patterns; BMPs would be implemented through the SWPPP required for compliance with the Clean Water Act and the CCCWP, as discussed under Impact HYD-1. Construction-related impacts would be site-specific and temporary in nature, limited to the construction period for the respective development, and would not affect groundwater recharge rates and patterns. Therefore, construction-related impacts related to groundwater supply and recharge would be less than significant.

Operation

Water service is provided to much of Pleasant Hill by the CCWD, which obtains its water supply exclusively from the Delta via the Contra Costa Canal, through contract with the United States Bureau of Reclamation (Reclamation). ³⁶ The CCWD does not pump or distribute groundwater; therefore, water obtained from the CCWD by the Pleasant Hill to support development facilitated by the 2040 General Plan would not consist of groundwater, and would not deplete groundwater resources. The Martinez Water District and EBMUD also serve some areas of the western portion of Pleasant Hill, but similarly do not provide groundwater as a supply source (except through

³⁵ Contra Costa County Flood Control and Water Conservation District. 2009. The 50 Year Plan "From Channels to Creeks". Adopted March 31. Available: https://www.contracosta.ca.gov/DocumentCenter/View/6853/50---Year-Plan-3-20-09-BOS-compressed-PDF?bidId= (accessed October 26, 2022).

³⁶ CCWD. 2021. 2020 Urban Water Management Plan. June. Available: https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF (accessed October 19, 2022).

conjunctive use and groundwater recharge programs developed for the purpose of managing groundwater sustainably). As such, development facilitated by the 2040 General Plan would connect to the existing Pleasant Hill water supply system and would not install groundwater supply wells or conduct on-side groundwater pumping to meet water demands. Therefore, development facilitated by the 2040 General Plan would not affect groundwater through direct pumping, and potential operational groundwater impacts would be limited to indirect means such as through alteration of infiltration and recharge, as discussed below.

The General Plan area is primarily built-up, and development would be focused on infill within previously disturbed areas, and reuse of existing development. Previously undisturbed areas would not be affected by the proposed plan. Goals and policies of the 2040 General Plan encourage the use of LID features and explicitly aim to increase areas of permeable surfaces, which would facilitate increased stormwater retention and infiltration to the subsurface. This includes Goal ENV-3, which is introduced under Impact HYD-1, and would be further implemented through the policies below, which aim to protect, reclaim, and improve natural stream corridors as part of the development that would be facilitated by the 2040 General Plan.

- **Policy ENV-3.4 Stream, Wetland, and Riparian Reclamation.** Reclaim degraded streams, wetlands, riparian areas, and wildlife migration corridors, where possible, in cooperation with the Flood Control District, and other local and regional organizations.
- **Policy ENV-3.5** Reclamation with New Development. Require new development adjacent to creek protection zones to encourage the reclamation of adjacent creeks, wetlands, and riparian areas.
- Policy ENV-3.6 Natural Stream Corridor Retention and Improvement. Actively support the use of natural waterways within the city. The City will actively work to avoid any new channelization of creeks and waterways within the city and shall work with regional agencies to restore channelized sections to a more natural channel, where feasible.

Policies ENV-3.4, ENV-3.5, and ENV-3.6 would serve to minimize or avoid potential indirect impacts to groundwater recharge that might otherwise occur as a result of channelizing or alteration to existing natural cover areas including streams, wetlands, and riparian areas.

Also as discussed under Impact HYD-1, the 2040 General Plan includes policies to require LID features for new development (Policies PFS-3.3, HS-5.6, ENV-2.4, ENV-2.5), as well as for the retrofitting of existing development (Policy PFS-3.4). While development facilitated by the 2040 General Plan could increase impervious surfaces throughout the General Plan area, LID features associated with development would minimize potential to increase impervious surfaces and adversely affect infiltration and runoff; such features may include bioretention systems, swales, green roofs, infiltration systems, and permeable pavers. This would in turn facilitate infiltration of surface water to the subsurface and help filter contaminants out of surface runoff as it infiltrates soil to underlying groundwater resources. Therefore, operational impacts related to groundwater supply and recharge would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Drainage Pattern Alteration

Significance Criterion c: Would the proposed plan 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 off-site;
- 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?

Impact HYD-3 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT ALTER THE COURSE OF A STREAM OR RIVER OR SUBSTANTIALLY ALTER EXISTING DRAINAGE PATTERNS, INCLUDING THROUGH NEW IMPERVIOUS SURFACES, AND REGULATORY REQUIREMENTS AS WELL AS POLICIES TO PROTECT AND IMPROVE DRAINAGE PATTERNS WOULD MINIMIZE EROSION, FLOODING, AND RUNOFF. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

ALTERATION OF DRAINAGE RESULTING IN EROSION/SILTATION

Development facilitated by the 2040 General Plan would not alter the course of any stream or river. In addition, as discussed under Impact HYD-2, above, the 2040 General Plan includes policies under Goal ENV-3 to reclaim degraded streams (Policy ENV-3.4), maintain creek protection zones (Policy ENV-3.5), and avoid any new channelization of creeks and waterways in the city (Policy ENV-3.6), which would collectively reduce or avoid adverse construction-related impacts associated with drainage pattern alterations, by protecting and improving existing drainage patterns.

The potential for erosion to occur during construction is addressed under Impact HYD-1, which details how compliance with regulatory requirements would include BMPs to minimize or avoid potential for erosion to occur during construction activities. Development facilitated by the 2040 General Plan would not result in substantial drainage pattern alterations, and would not result in substantial erosion on-or off-site. Therefore, construction impacts related to flooding or alteration of flood flows would be less than significant.

Operation

INCREASED RUNOFF RESULTING IN FLOODING

The discussion provided under Impact HYD-1 addresses potential for runoff and describes that development facilitated by the 2040 General Plan, including implementation of LID features, could include infiltration ponds and features to manage stormwater runoff in a way that minimizes runoff. Specifically, Policies PFS-3.3 and PFS-3.4 encourage design features that maximize stormwater

infiltration, which reduces the velocity of stormwater runoff, and Policy HS-5.6 explicitly applies LID features to new development as well as remodeling and public projects. In addition, Policies ENV-2.4 and ENV-2.5 further complement requirements for LID features by facilitating use of materials and methods that increase infiltration of surface water, which reduce runoff. These policies and the 2040 General Plan are consistent with the County Flood Control and Water Conservation District's 50-Year Plan, which encourages local communities to plan for modifying flood control channels to incorporate natural features.³⁷

Therefore, while future development could result in site-specific drainage pattern alterations, due to the use of LID features and stormwater management in accordance with the aforementioned policies, the proposed plan would not result in increased runoff, and potential impacts would be less than significant.

ADDITIONAL SOURCE OF RUNOFF EXCEEDING STORM DRAIN SYSTEM CAPACITY

The potential for water quality degradation to occur as a result of polluted runoff is addressed under Impact HYD-1; the 2040 General Plan would not create or contribute substantial new sources of polluted runoff. Development facilitated by the 2040 General Plan would be concentrated as infill development, and would not include drainage pattern alterations that would result in exceedance of the storm drain system. As with existing development throughout the General Plan area, future development would connect to the City's existing storm drain system. The 2040 General Plan includes Policies ENV-2.1 and ENV-2.2, under Goal ENV-2 (introduced under Impact HYD-1), which address the active maintenance and improvement of the city drainage system.

- **Policy ENV-2.1 Drainage System Maintenance.** Maintain and upgrade the city drainage system, including regularly clearing drainage systems of debris build up that exacerbates flood impacts.
- **Policy ENV-2.2 Drainage Improvements.** Cooperate with regional agencies to complete regional storm drainage improvements.

Policy ENV-2.1 ensures that drainage system capacity is maintained to appropriately accommodate runoff from development within the General Plan area, and Policy ENV-2.2 supports ongoing improvements to the existing storm drainage system. In addition, Policy PFS-3.2, under Goal PFS-2 (introduced under Impact HYD-1), ensures appropriate conveyance capacity for all drainage facilities.

Policy PFS-3.2 Drainage Facility Maintenance. Collaborate with property owners and the Flood Control District to regularly maintain and provide funding for all drainage facilities to ensure that they continue operating at full carrying capacity.

In addition, as stated in Section 3.8.2, *Environmental Setting*, under "Surface Water Hydrology," development facilitated by the 2040 General Plan would require verification by the Contra Costa County Flood Control and Water Conservation District and the City Engineering Division that adequate storm drainage facilities exist or are funded prior to project approval. Although the proposed plan would not alter drainage patterns such that exceedance of storm drain system capacity occurs, future development would connect to the existing storm drain system; with

³⁷ Contra Costa County Flood Control and Water Conservation District. 2009. The 50 Year Plan "From Channels to Creeks". Adopted March 31. Available: https://www.contracosta.ca.gov/DocumentCenter/View/6853/50---Year-Plan-3-20-09-BOS-compressed-PDF?bidId= (accessed October 26, 2022).

appropriate maintenance, as supported through the 2040 General Plan and the policies presented above, potential impacts would be less than significant.

Impedance or Redirection of Flood Flows

As shown on Figure 3.8-3, there are two classified flood zones within Pleasant Hill, a 100-year floodplain and 500-year floodplain. Development facilitated by the 2040 General Plan would be concentrated as infill within previously developed areas, and would not impede or redirect existing flood flows. Below are policies from the Land Use (LU) Element of the 2040 General Plan, which address flood control in the General Plan area, and require that new development complies with performance standards (Policy LU-5.3) and contributes to flood control services (Policy LU-5.5).

Goal LU-5 Protect and enhance Pleasant Hill's quality of life and unique identity while continuing to grow and change.

- **Policy LU-5.3** Compliance with Performance Standards. Require that all new development comply with the City's performance standards for fire, police, parks, water, flood control, sanitary sewer, and transportation facilities.
- **Policy LU-5.5 Development Contribution Requirement.** Require all new development to contribute to or participate in the improvement of park, school, police, sanitary, water, and flood control services in proportion to the demand generated by the development's occupants and users.

Policies LU-5.3 and LU-5.5 ensure that development within the General Plan area is appropriately served by flood control facilities and programs, and development facilitated by the 2040 General Plan would not result in drainage pattern alterations that impede or redirect flood flows.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Risk of Pollutant Release Due to Inundation

Significance Criterion d: In flood hazard, tsunami, or seiche zones, would the proposed plan risk release of pollutants due to inundation?

Impact HYD-4 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT INCREASE EXISTING POTENTIAL FOR INUNDATION WITHIN FLOOD HAZARD AREAS TO OCCUR AND WOULD NOT INTRODUCE SUBSTANTIAL NEW POLLUTANT SOURCES THAT COULD POTENTIALLY BE RELEASED DUE TO INUNDATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Potential impacts associated with risk of release of pollutants during construction activities are addressed under Impact HYD-1. As discussed therein, potential construction-related impacts would be less than significant through regulatory compliance and through implementation of policies to protect and enhance water quality. The presence of construction activities within a FEMA-

designated Flood Hazard Area would not alter the potential for water quality impacts to occur, including as related to potential risk of release of pollutants. No construction impacts to water quality resulting from a Flood Hazard Area would occur.

Operation

The General Plan area is not located within the inundation area of any dams, or within a tsunami hazard area, and no enclosed surface water bodies are present that could result in inundation due to seiche. Therefore, the proposed plan would not introduce a risk of pollutant release due to inundation from dam failure, tsunami, or seiche.

There are areas of both 100-year and 500-year floodplains within the General Plan area. Figure 3.8-3 shows that these areas area occur along a north-south alignment in the eastern portion of the city. The aerial imagery in Figure 3.8-3 shows that these flood hazard areas are located within portions of the General Plan area that are fully developed. Development facilitated by the 2040 General Plan would be concentrated as infill development. The Impact HYD-3 impact discussion related to "Impedance or Redirection of Flood Flows" identifies 2040 General Plan Goal LU-5 and associated policies that address flood control in the General Plan area and require that new development comply with performance standards (Policy LU-5.3) and contribute to flood control services (Policy LU-5.5). These policies ensure that development within the General Plan area is appropriately served by flood control facilities and programs, which minimizes the potential for inundation from flooding to occur, and thereby reduces the potential for risk of pollutant release to occur. Through Policies LU-5.4 and LU-5.5, new development would be served by appropriate flood control services and facilities. Development facilitated by the 2040 General Plan would not introduce new potential sources of polluted runoff, or new hazardous materials or potential for pollutant releases to occur in the General Plan area. Therefore, while portions of the General Plan area are within flood hazard areas, the proposed General Plan would not alter existing potential for inundation or pollutant release, and 2040 General Plan operational impacts related to water quality resulting from a Flood Hazard Area would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Water Quality Control and Sustainable Groundwater Management Plan Consistency

Significance Criterion e: Would the proposed plan conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HYD-5 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

The potential to result in impacts to groundwater management would be limited to operation, when groundwater supply and recharge could be affected by permanent land use changes. In addition,

construction activities would be required to adhere to water quality control regulations, including BMPs, to be included in project-specific SWPPPs for any construction project disturbing more than one acre, as discussed under Impact HYD-1. Therefore, construction of the 2040 General Plan would not conflict with or obstruct implementation of a surface water quality or groundwater quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

Operation

Development facilitated by the 2040 General Plan would be required to adhere to NPDES drainage control requirements as well as municipal requirements to manage surface water quality during operations, as discussed under Impact HYD-1. The proposed plan would not conflict with or obstruct implementation of a water quality control plan. Similarly, groundwater resources are addressed under Impact HYD-2, which details how potential impacts to groundwater would be less than significant. In addition, as discussed in Section 3.8.2, *Environmental Setting*, under "Groundwater Resources," the General Plan area overlies the Ygnacio Valley Groundwater Basin, which is designated by DWR as Very Low Priority and, thus, not required to be managed under a GSP for SGMA. Water supply for development facilitated by the 2040 General Plan would be purchased from CCWD, EBMUD, and Martinez Water District and would not affect groundwater resources. Therefore, operation of the 2040 General Plan would not conflict with or obstruct implementation of a surface water or groundwater quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

3.8.5 Cumulative Impacts

The geographic scope of the cumulative hydrology and water quality analysis is the surface area of the Walnut Creek Watershed system shown in Figure 3.8-1 and the Ygnacio Valley Groundwater Basin shown on Figure 3.8-2. Potential impacts associated with surface water and drainage would generally be site-specific and confined within the stormwater drainage and management areas of Pleasant Hill. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1, *Cumulative Plans and Larger-scale Projects List*, which lists the relevant plans and larger-scale projects considered in conjunction with the proposed plan (refer to Chapter 3, *Environmental Impact Analysis*).

Surface Water

Table 3-1 identifies other general plan buildouts that direct the type and intensity of land use and development within specific areas, consisting primarily of residential and commercial projects, none of which overlap with the General Plan area or are within Pleasant Hill. As with the proposed plan, cumulative plans and projects would generally occur as infill and would not develop previously undisturbed areas or substantially change drainage patterns of the area. Additionally, regulations protecting surface water would be equally applicable to cumulative projects as the proposed plan, including the NPDES program which requires implementation of SWPPPs with BMPs to minimize or

avoid potential impacts to surface waters. Due to the site-specific nature of surface water impacts, the lack of site overlap between cumulative projects and the proposed plan, and the common applicability of surface water regulations, potential cumulative impacts associated with surface flows and drainage would be less than significant.

Groundwater

Potential impacts to groundwater could occur through direct pumping and consumption of groundwater, or through indirect interference with groundwater recharge. However, due to the existing developed nature of the General Plan area, and the fact that neither the proposed plan nor cumulative projects would develop previously undisturbed areas or substantially change drainage patterns of the area (see "Surface Water" above), cumulative impacts associated with interference with groundwater recharge would be less than significant. In addition, no cumulative impacts associated with direct consumption of groundwater would occur, because water supply for the proposed plan would be provided primarily by the CCWD, as well as Martinez Water District and EBMUD in some areas of the western portion of Pleasant Hill, and neither the CCWD, Martinez Water District, nor EBMUD uses groundwater to meet local demands (refer to Section 3.8.2, *Environmental Setting*, under "Groundwater Basin Hydrology"). As discussed under Impact HYD-2, groundwater activities conducted by these agencies involve conjunctive use and groundwater recharge programs that are designed to manage groundwater sustainably.

Water Quality

Development facilitated by cumulative plans and projects would comply with policies related to water quality, including through implementation of project-specific SWPPPs as applicable, including with BMPs to minimize or avoid water quality degradation from construction and other ground-disturbing activities. As discussed in Section 3.8.3, *Environmental Setting*, under "National Pollutant Discharge Elimination System," the City of Pleasant Hill is a member agency of the CCCWP, which assists municipalities and other agencies in Contra Costa County with implementation of the NPDES Permit; the proposed plan as well as cumulative plans listed in Table 3-1 are subject to the same requirements of the Clean Water Act, and would be implemented in compliance with NPDES and SWPPP requirements, through the CCCWP.

In addition, the proposed plan would not adversely affect water quality by increasing the extent of permeable surfaces in the area. While development facilitated by the 2040 General Plan could increase impervious surfaces throughout the General Plan area, LID features associated with development would minimize potential to increase impervious surfaces and adversely affect infiltration and runoff; such features may include bioretention systems, swales, green roofs, infiltration systems, and permeable pavers. This would in turn facilitate infiltration of surface water to the subsurface and help filter contaminants out of surface runoff as it infiltrates soil to underlying groundwater resources. The potential for cumulative impacts related to water quality is considered unlikely. Therefore, cumulative impacts related to water quality would be less than significant.

Flooding

The cumulative projects would likely include LID features as part of proposed infill development and development and, thus, would increase the extent of permeable surfaces that would increase the rate and extent of infiltration of surface water runoff, thereby reducing its velocity. Due to the site-specific nature of flooding impacts and the infill characteristics of the proposed plan as well as the

other cumulative plans and projects, cumulative impacts related to potential for flooding would be less than significant.

Overall Level of Cumulative Significance

Less than significant

3.9 Land Use Planning, Population, and Housing

3.9.1 Introduction

This section summarizes Pleasant Hill's land use characteristics, including the overall land use pattern as well as a more detailed analysis by major land use type, and analyzes existing plans and focus areas with development potential in order to determine the potential environmental effects of the proposed plan related to Land Use Planning. Additionally, this section addresses the potential population growth and housing displacement impacts associated with development facilitated by the proposed plan. Information included in this section is partially based on data obtained from the United States Bureau of the Census (US Census), the California Department of Finance (CDF), and the Association of Bay Area Governments and the Metropolitan Transportation Commission (ABAG/MTC).

3.9.2 Environmental Setting

Current Physical Land Use

Pleasant Hill (General Plan Area)

The General Plan area covers the 7.08 square miles (approximately 4,500 acres, including streets, highways, and other transportation corridors) of land comprising the Pleasant Hill Sphere of Influence. Pleasant Hill's current land use pattern is the result of more than 100 years of change, starting from an agricultural community to the present-day built-out city. Residential and commercial development is currently driven by local and regional demand. Pleasant Hill is characterized as a suburban residential community, as more than 70 percent of Pleasant Hill's land is occupied with residential uses. Neighborhoods in the northern two-thirds of Pleasant Hill are newer compared to those in the southern portion, and multi-family housing is located primarily near the downtown area and in the Chilpancingo and Ellinwood area in the northern and eastern portions of Pleasant Hill.

Parks and open space account for nine percent of land uses, while institutional uses (such as health care facilities, churches, schools, shelters and government-owned property) account for seven percent. Additional land uses include commercial/business (four percent), industrial (three percent), mixed use (two percent) and office (two percent). Commercial development is concentrated along Interstate 680 (I-680) in the eastern portion of the Pleasant Hill Sphere of Influence. Light industrial areas are located in the northernmost area of Pleasant Hill east of Pacheco Boulevard and in the southeastern corner along Hookston Road.

Both the number of acres and the general percentage of total area distribution of existing land uses within Pleasant Hill is shown in Table 3.9-1. As shown in Table 3.9-1, the various residential land uses (single-family and multi-family combined) make up the largest share of existing land use within the Pleasant Hill Sphere of Influence. Approximately 3,285 acres (or 73 percent) of Pleasant Hill's land uses are used for residential uses.

Table 3.9-1 Distribution of Existing Land Uses in Pleasant Hill General Plan Area

Existing Land Use	Acres	Percentage of Total Area
Single-Family Residential	2,835	63
Multi-Family Residential	450	10
Parks/Open Space	405	9
Institutional	315	7
Commercial/Business	180	4
Industrial	135	3
Mixed-Use	90	2
Office	90	2

Source: Pleasant Hill, City of, 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook.

Note 1: This table does not include streets, highways, or other transportation corridors. Therefore, total acreage accounts for only these land uses and does not reflect the total acreage within the Pleasant Hill Sphere of Influence.

Note 2: While 2022 is the baseline year for analysis in the EIR, these land uses are sourced from a 2019 source, however the City has determined, due to the Covid-19 pandemic, that the City's land uses have not changed substantially in that timeframe.

Most of the City's zoning districts pertain to residential land uses (65 percent by area). Single-family land use types are differentiated by zones that allow lot sizes of 6,000 square feet, 7,000 square feet, 10,000 square feet, 15,000 square feet, and 20,000 square feet. Multi-family housing zones are differentiated by low-density, medium-density, and high-density residential land use types. 25 percent of land within the City falls within planned unit development and precise plan districts, including Planned Unit Districts, Precise Plan Districts, and Hillside Planned Unit Districts. The City uses planned unit development and precise plan districts to establish procedures for the development or large parcels of land by ensuring orderly and thorough planning and review procedures that will result in quality projects.

Pleasant Hill is almost entirely built out with approximately 102 acres of vacant land within the Pleasant Hill Sphere of Influence. Most of this vacant land (approximately 80 acres) is currently designated for single-family development. Remaining vacant land primarily consists of small parcels and is currently designated for multi-family development, office/institutional uses, and commercial uses.

Areas Surrounding General Plan Area

TO THE NORTH

The City of Concord borders Pleasant Hill to the northeast and the City of Martinez borders Pleasant Hill to the northwest. The unincorporated community of Pacheco is immediately north of Pleasant Hill. Directly adjacent land uses are primarily residential neighborhoods with some open space and recreational areas.

TO THE EAST

The City of Concord borders Pleasant Hill to the northeast and the City of Walnut Creek and unincorporated Contra Costa County borders Pleasant Hill to the southeast. Directly adjacent land uses include residential neighborhoods and commercial developments.

TO THE SOUTH

The City of Walnut Creek borders Pleasant Hill to the south, and directly adjacent uses include residential neighborhoods, commercial and office developments, and industrial operations.

TO THE WEST

The unincorporated neighborhoods of Baywood and Lafayette Hills, as well as Briones Regional Park, border Pleasant Hill to the west. Briones Regional Park is a 6,110-acre regional park part of the East Bay Regional Park District System accessible via Alhambra Valley. Directly adjacent land uses include residential neighborhoods and open space.

Current Land Use Designations and Zoning

Pleasant Hill (General Plan Area)

The existing (2003) Pleasant Hill General Plan establishes 18 land use designations to provide a mixture of land uses for the City, and the current Pleasant Hill Zoning Code establishes 18 separate zoning categories to provide a mixture of permitted land use densities, heights, and types for the City. Figure 2-3 in Chapter 2.0, *Project Description*, show the City's existing Land Use Designations Map.

Population, Housing, and Employment

Pleasant Hill (General Plan Area)

POPULATION

The City of Pleasant Hill experienced approximately 319 percent growth from 1950 to 1960. After its incorporation in 1961, the City of Pleasant Hill's population growth slowed. From the 1960s until 2000, population growth in Pleasant Hill was slow and overall population increased roughly one percent per year. Population growth between 2000 and 2010 was virtually nonexistent at approximately one percent.¹

Since 2010, the population of Pleasant Hill increased by approximately 0.6 percent per year, with a total increase of less than 2,000 people during that timeframe². In comparison, the overall population in Contra Costa County during this same timeframe grew nearly twice as fast at 1.1 percent annually ³. Population growth since 2010 in Pleasant Hill has continued at a slower rate than previous decades. As of January 2022, the City of Pleasant Hill had a population of 34,026 residents.⁴

HOUSEHOLDS AND DWELLING UNITS

A household is defined by the CDF and the US Census as a group of people who occupy a dwelling unit. A household differs from a dwelling unit because the number of dwelling units includes both occupied and vacant dwelling units. Not all of a jurisdiction's population lives in households. Rather,

¹ MTC/ABAG. 2022. Bay Area Census City of Pleasant Hill. Available: http://www.bayareacensus.ca.gov/cities/PleasantHill.htm. (accessed December 2022)

 $^{^{\}rm 2}$ CDF. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State. Available:

https://dof.ca.gov/forecasting/demographics/estimates/. (accessed October 2022)

³ CDF. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State. Available:

https://dof.ca.gov/forecasting/demographics/estimates/. (accessed October 2022)

⁴ CDF. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State. Available:

https://dof.ca.gov/forecasting/demographics/estimates/. (accessed October 2022)

a portion of a jurisdiction's population lives in group quarters, such as board and care facilities; others are experiencing homelessness.

Small households, consisting of one to two persons per household, generally reside in units with zero to two bedrooms; family households of three to four persons per household normally reside in units with three to four bedrooms. Large households of five or more persons per household typically reside in units with four or more bedrooms. However, the number of units in relation to the household size may also reflect preference and economics. Many small households obtain larger units and some large households live in small units for economic reasons.

As of 2022, there were approximately 14,498 dwelling units in Pleasant Hill. Most of Pleasant Hill's households reside in single-family dwelling units, with over 60 percent of the Pleasant Hill current housing stock consisting of detached single-family homes. Ten percent of homes in Pleasant Hill are single-family attached units, and 29 percent are multi-family units, including condominiums. Pleasant Hill has experienced slow growth in housing supply; from 1990 to 2019, an average of 24 units per year were constructed. This average growth varies by decade and was higher between 1990 and 2000 at 37 new dwelling units per year, and between 2000 to 2010 at 30 units per year. Between 2010 to 2019, an average of two housing units were built per year.

Pleasant Hill experiences a stable housing vacancy rate of 4.6 percent, which is lower than both the State average of 8.1 percent and the Contra Costa County average of 6.4 percent. The median age of homes in Pleasant Hill is 46 years, with approximately 43 percent of the Pleasant Hill current housing stock built between 1970 to 1989.

EMPLOYMENT

Employment indicates the number of people who reside in a jurisdiction that have a job within or outside of that jurisdiction. Pleasant Hill has approximately 17,600 jobs, which represents about five percent of total jobs in Contra Costa County. Approximately 18,400 residents in Pleasant Hill are employed. Between 2008 and 2018, Pleasant Hill added approximately 700 jobs. The number of employed residents has grown from 16,870 in 2010, an 8 percent increase This indicates that the number of employed residents has outpaced population growth.

JOBS-HOUSEHOLD RATIO

The jobs-household ratio in a jurisdiction is an overall indicator of jobs availability within the area. A balance of jobs and households can give residents an opportunity to work locally and avoid employment commutes to other places in the region. Pleasant Hill has slightly more employed residents living in Pleasant Hill (18,400 residents) than it has jobs (17,600 jobs). Approximately 3,280 people both live and work in Pleasant Hill; 14,515 people work in but live outside Pleasant Hill, and 15,120 people live in but work outside Pleasant Hill. Of the population that lives within Pleasant Hill but commutes to other jurisdictions for work, approximately 25 percent commute to other places within Contra Costa County; 16 percent commute to the City and County of San Francisco; 13 percent commute to the East Bay area; 17 percent commute to the San Francisco Peninsula area; and 11 percent commute to areas in the southern I-680 corridor. Approximately 14,500 non-Pleasant Hill residents commute into Pleasant Hill for work daily.⁷

⁵ Pleasant Hill, City of. 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook.

⁶ MTC/ABAG. 2022. Bay Area Census City of Pleasant Hill. Available: http://www.bayareacensus.ca.gov/cities/PleasantHill.htm. (accessed December 2022)

⁷ Pleasant Hill, City of. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook.

ABAG's growth pattern depicting projected household and job growth by "superdistrict" illustrates a 2015 job to household ratio of 1.4 in northern Contra Costa County, which is slightly below the region-wide average of 1.5.8 Pleasant Hill's jobs per household ratio being above one indicates that regional residents are likely commuting to employment inside of Pleasant Hill. In general, most households have more than one worker; therefore, a ratio of jobs to household should be well above 1:1 to have a balance of jobs to households.

3.9.3 Regulatory Framework

Federal Regulations

No federal plans, policies, regulations, or laws related to population and housing are applicable to the proposed plan.

State Regulations

California Government Code

California Government Code Section 65300 regulates the substantive and topical requirements of general plans. State law requires each city and county to adopt a general plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning." The California Supreme Court has called the general plan the "constitution for future development." The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.

California Government Code Section 65301 requires a general plan to address the geographic territory of the local jurisdiction and any other territory outside its boundaries that bears relation to the planning of the jurisdiction. The jurisdiction may exercise its own judgment in determining what areas outside of its boundaries to include in the Planning Area. The State of California General Plan Guidelines state that the Planning Area for a city should include (at minimum) all land within the city limits and all land within the city's sphere of influence. The proposed plan would not facilitate land use changes outside of city limits and within the sphere of influence; therefore, the plan area for the proposed plan consists of Pleasant Hill city limits.

In counties and general law cities, ⁹ zoning provisions must be consistent with the general plan. Pleasant Hill is a general law city and is, therefore, required to have zoning consistency with its General Plan.

Local and Regional Regulations

Plan Bay Area 2050 and ABAG Regional Housing Needs Allocation

The ABAG/MTC Plan Bay Area 2050, adopted in October 2021, integrated transportation and land-use plan for the nine-county San Francisco Bay Area, including Contra Costa County. Plan Bay Area 2050 meets all state and federal requirements for a Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). Plan Bay Area 2050 describes where and how the region can accommodate the additional 1.4 million new households and 1.4 million new jobs projected in the Bay Area by 2050 and details the regional transportation investment strategy over this period. Plan

⁸ ABAG. 2021. Plan Bay Area 2050 Growth Pattern. Updated January 21, 2021.

⁹ General law cities are municipalities limited to governmental structures and powers specifically granted by State law.

Bay Area 2050 identifies 35 strategies focused on improving housing, the economy, transportation, and the environment across the Bay Area over a 30-year period. Four geographic areas are identified in Plan Bay area 2050 to guide where future growth in housing and jobs would be focused over the next 30 years: Priority Development Areas (PDA), Priority Production Areas, Transit-Rich Areas, and High-Resource Areas. ABAG and MTC developed land use and transportation scenarios in Plan Bay Area 2050 that distributes the total amount of anticipated growth across the region and evaluates how well each scenario measures against the Plan goals. Based upon performance, the preferred scenario provides a regional pattern of household and employment growth and a corresponding transportation investment strategy.

Bay Area Rapid Transit District Transit Oriented Development Policy

In 2016, Bay Area Rapid Transit (BART) District's Board of Directors adopted a Transit Oriented Development (TOD) Policy that aims to promote high-quality, more intensive development on and near BART stations. ¹⁰ BART's TOD Policy has the goal of increasing transit ridership and quality of life at and around BART stations by encouraging and supporting high-quality TOD within walking distance of BART stations, and by reducing the access mode share of the automobile by enhancing multi-modal access to and from BART stations. The Pleasant Hill BART Station is located just southeast of the city limits in the unincorporated County area, at Contra Costa Centre.

Contra Costa County Airport Land Use Compatibility Plan

The purpose of the Contra Costa County Airport Land Use Compatibility Plan (ALUCP) is to establish procedures and criteria by which, in accordance with the California State Aeronautics Act:

1.1.1. Contra Costa County Airport Land Use Commission (ALUC) — The ALUC:

- a) Shall review proposed land use development in Contra Costa County and affected cities within the county for compatibility with airport activity.
- b) Shall review certain types of airport development proposals which are also subject to ALUC review and are addressed by the Plan.
- **1.5.1.** Actions Which Always Require ALUC Review As required by state law, the following types of actions shall be referred to the ALUC for determination of consistency with the ALUCP prior to their approval by the local jurisdiction:
- 1) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport influence area (State Aeronautics Act Section 21676(b)).
- **1.5.3. Major Land Use Actions** The scope or character of certain proposed major land use actions, as listed below, is such that their compatibility with airport activity is a potential concern. Even though these actions may be basically consistent with the local general plan or specific plan, sufficient detail may not be known to enable a full airport compatibility evaluation at the time that the general plan or specific plan is reviewed. To enable better assessment of compliance with the compatibility criteria set forth herein, ALUC review of these actions may be warranted.

¹⁰ BART. 2016. Transit-Oriented Development Policy. Amended April 23, 2020. Available: https://www.bart.gov/sites/default/files/docs/BART%20Transit-Oriented%20Development%20Policy_Amended2020-04-23.pdf. (accessed March 2022)

Depending upon the circumstances indicated in Countywide Policy 1.5.3 above, such reviews may be either required or requested.

- (a) For the Buchanan Field Airport environs:
 - 2) Actions affecting land uses within the composite 55 dB CNEL noise contour or any Safety Zone (see Figures 3B and 3C in Chapter 3 of the ALUCP):
 - Proposed residential development, including land divisions, consisting of 20 or more acres and 5 or more lots.
 - Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater.
 - 3) Additionally:
 - Within Safety Zones 3 or 4: Any proposal for new development (including buildings, antennas, and other structures) more than 50 feet tall.

The northeastern portion of the General Plan area is within Buchanan Field Airport's Airport Influence Area, as shown on Figure 3A of the ALUCP. 11

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to land use/planning and population/housing, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Downtown Specific Plan

The Pleasant Hill Downtown Specific Plan (PHDSP), adopted in 1991 and amended several times since, establishes a long-term strategy for realizing the development potential of downtown Pleasant Hill. The goal of the PHDSP is to develop downtown Pleasant Hill as a competitive retail and commercial center with a focus on entertainment and recreational facilities, including public amenities and other features to establish an identifiable sense of place for the City of Pleasant Hill that provides a positive image for Pleasant Hill. The plan's guiding policies include encouraging development of a compatible mix of retail, recreational, civic, office, and residential uses with an emphasis on ground floor retail uses. ¹²

Pleasant Hill Priority Development Areas

Cities and counties within the jurisdiction of ABAG identify and delineate Priority Development Areas (PDAs), or areas near public transit planned to contain new homes, jobs, and community amenities. Local governments nominate these areas to ABAG for designation as a PDA, and if adopted by ABAG, the PDA Planning and Technical Assistance Grant programs become available to that local government. The PDA eligibility criteria include but are not limited to at least 50 percent of the PDA being within 0.5 mile of an existing or planned rail station or ferry terminal, a bus stop with peak service frequency of 15 minutes or less, or at least 50 percent of the area being defined as

¹¹ CCCALUC. 2000. Contra Costa County Airport Land Use Compatibility Plan. Adopted December 2000. Available:

https://www.contracosta.ca.gov/DocumentCenter/View/856/Buchanan-Field-Airport-Policies. (accessed November 2022)

¹² Pleasant Hill, City of. 2012. Downtown Pleasant Hill Specific Plan. Available: https://www.pleasanthillca.org/1247/Downtown-Pleasant-Hill-Specific-Plan. (accessed October 2022)

a High or Highest Resource area by the California Department of Housing and Community Development.¹³

Pleasant Hill contains two PDAs. The Buskirk Avenue-Monument Boulevard Corridor PDA is generally located northeast and southwest of the Buskirk Avenue and Monument Boulevard intersection; the Diablo Valley College Bus Transit Center PDA is generally located in the area bounded by Contra Costa Boulevard, Chilpancingo Parkway, and Golf Club Road.

Pleasant Hill Municipal Code and Zoning Ordinance

Zoning is the primary tool used to implement a community's general plan. A major difference between a general plan and zoning ordinance is that the general plan provides general guidance on the location, type, and density of new growth and development over the long term, while the zoning ordinance provides detailed development and use standards for each parcel of land. The zoning ordinance divides the community into zoning districts and specifies the uses that are permitted, conditionally permitted, and in some instances, which uses are specifically prohibited within each district.

Typically, a zoning ordinance consists of text and a map delineating districts for such basic land uses as residential, commercial, and industrial, and establishing special regulations for historic preservation, floodplains, hillside development and other specific concerns. For each of the basic land uses, the zoning ordinance text typically includes an explanation of the purpose of the zoning district; a list of principally permitted and conditionally permitted uses; and standards for minimum lot size, density, height, lot coverage, setback, and parking. The zoning ordinance also typically describes procedures for processing discretionary approvals.

The Pleasant Hill Zoning Ordinance (Pleasant Hill Municipal Code Title 18) includes 18 zoning districts. Each zoning district has developed standards that are designed to protect and promote the health, safety, and general welfare of the community and to implement the policies of the General Plan. The zoning districts only apply to land within City limits and the standards aim to preserve the character and integrity of existing neighborhoods. Within a typical district there are regulations related to land use, lot size, coverage, building heights, parking, and landscaping.

The 18 zoning districts established by the Pleasant Hill Zoning Ordinance are:

- R6 (Single-Family, 6,000 square foot lots)
- R7 (Single-Family, 7,000 square foot lots)
- R10 (Single-Family, 10,000 square foot lots)
- R10A (Single-Family, average 10,000 square foot lots)
- R15 (Single-Family, 15,000 square foot lots)
- R20 (Single-Family, 20,000 square foot lots)
- MRL (Multi-Family, Low Density)
- MRM (Multi-Family, Medium Density)
- MRH (Multi-Family, High Density)
- NB (Neighborhood Business)
- RB (Retail Business)
- C (General Commercial)

¹³ MTC. 2022. Priority Development Areas. Available: https://mtc.ca.gov/planning/land-use/priority-development-areas-pdas. (accessed October 2022)

- PAO (Professional and Administrative Offices)
- LI (Light Industrial)
- PUD (Planned Unit District)
- PPD (Precise Plan District)
- HPUD (Hillside Planned Unit District)
- PUD-H (Historic Planned Unit District)

3.9.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 *CEQA Guidelines* Appendix G significance criteria questions related to Land Use Planning, Population, and Housing.

Would the 2040 General Plan:

- a) Physically divide an established community?
- b) 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?
- c) 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?
- d) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Approach to Analysis

Land Use Planning

The evaluation of proposed plan impacts related to land use planning is based on a comparison of the 2040 General Plan to the applicable plans, policies, and regulations to determine if development facilitated by the proposed plan would conflict with a plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This section also analyzes whether development facilitated by the proposed plan, or its policies would physically divide communities.

Implementation of the proposed plan could result in a significant impact if it conflicts with applicable land use plans and policies of the PHDSP, ABAG/MTC Plan Bay Area 2050, Pleasant Hill Municipal Code, the Bay Area Air Quality Management District (BAAQMD) 2017 Clean Air Plan, and the Contra Costa County ALUCP.

A policy inconsistency is considered a significant adverse impact only if the inconsistency would result in a significant adverse physical impact based on the established significance criterion. Consistency of the proposed plan with applicable land use plans and policies is evaluated below.

Consistency of the proposed plan with the BAAQMD 2017 Clean Air Plan is discussed in Section 3.2, *Air Quality.* Consistency with the existing Zoning Ordinance in the Pleasant Hill Municipal Code is not evaluated, since adoption of the 2040 General Plan would require revisions to the Zoning Ordinance and Zoning Map to ensure consistency with the 2040 General Plan. Consistency with the Pleasant Hill Municipal Code with respect to protected trees are evaluated in Section 3.3, *Biological*,

Agriculture, and Forestry Resources, and with the Pleasant Hill adopted land use compatibility standards specifically with respect to noise are evaluated in Section 3.10, Noise.

Population and Housing

Population and housing trends in Pleasant Hill were evaluated by reviewing the most current data available from the US Census Bureau, CDF, the current 2003 Pleasant Hill General Plan, ABAG, and the 2023-2031 RHNA. Impacts related to population are generally social or economic in nature. Under CEQA, a social or economic change is not considered a significant effect on the environment unless the changes are directly linked to a physical change.

For purposes of this analysis, substantial population growth is defined as growth exceeding ABAG or BAAQMD population forecasts for Pleasant Hill. Substantial displacement would occur if allowed land uses would displace substantially more residences than would be accommodated through growth accommodated by the proposed plan.

EIR Scoping Comments Consideration

No comments that pertain to land use planning or population and housing were received in response to publication of the Notice of Preparation for this EIR.

Specific Thresholds of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of land use/planning and population/housing impacts resulting from implementation of the proposed plan.

- Development resulting in physically dividing a community area within Pleasant Hill.
- Development conflicting with the PHDSP or Municipal Code.
- Inducement of permanent or daytime population or employment growth in the Pleasant Hill planning area that would exceed City of Pleasant Hill or ABAG population projections for Pleasant Hill.
- Displacement of existing housing or permanent population.

Impact Evaluation

Established Community Division

Significance Criterion a: Would the proposed plan physically divide an established community?

Impact LU-1 IMPLEMENTATION OF THE PROPOSED 2040 GENERAL PLAN WOULD MAINTAIN ORDERLY DEVELOPMENT IN PLEASANT HILL AND WOULD NOT PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to physical division of an established community are limited to operational impacts. To the extent that construction activities obstruct roads, it would be temporary and would not constitute a division of an established community. No respective construction impacts would occur related to potential division of a community.

Operation

Most of the land within the General Plan area is currently developed, with more than 70 percent of Pleasant Hill's land occupied with residential uses. As summarized in Table 3.9-1, commercial uses are mostly concentrated along I-680 in the eastern portion of Pleasant Hill and account for less than five percent of Pleasant Hill's existing land use. Vacant parcels comprise approximately two percent of all land within the General Plan area; this limits new housing and development opportunities. Most vacant parcels are small and would require parcel consolidation to accommodate future development. As such, most new housing and development facilitated by the 2040 General Plan would occur through development of existing underutilized land and reuse of existing buildings and would increase the density and intensity of the existing land uses within Pleasant Hill. The proposed plan does not include substantial land use or circulation changes that would physically divide an established community, residential, or otherwise. For example, no major roads or other facilities would be constructed that would physically divide established communities within Pleasant Hill.

The potential growth associated with the 2040 General Plan is based on development assumptions/projections for residential and non-residential development for all land within the General Plan area through the year 2040. Vacant and underutilized parcels were identified using existing land use data from the Assessor's Office. Collectively, the existing uses, development capacity on the vacant and underutilized sites, planned and approved projects, and intensified development for residential, commercial, and civic uses sum up to be Pleasant Hill's total buildout capacity in 2040. The 2040 General Plan seeks to ensure that infill development is done in a way that captures opportunities to increase the local base of high-paying jobs while achieving a commercial business mix of uses that better serves resident needs and attracts visitors.

Pleasant Hill is surrounded by existing development and natural features, such as Briones Regional Park (located to the west), I-680 (located on the eastern edge), and neighboring development within the Cities of Concord and Martinez to the north and Walnut Creek to the south. As discussed above in Section 3.9.2, *Environmental Setting*, much of Pleasant Hill is developed with residential uses with established recreational parks and green spaces. The 2040 General Plan includes policies and establishes land use designations that identify the type and intensity of uses permissible in the General Plan area. Infill development and the creative reuse and development of existing sites have emerged as the primary means for accommodating future growth in Pleasant Hill. Intensity/density standards are established for each land use classification. The intent of the land use designations is to adequately classify and distinguish the various land uses needed within the General Plan area. The 2040 General Plan also aims to direct growth within the Pleasant Hill Sphere of Influence to ensure orderly buildout in density and intensity while maintaining existing neighborhood characteristics and encourage economic development that is compatible with existing uses to reinforce and create a cohesive community.

The existing transportation network in Pleasant Hill also presents constraints to future development, despite the ample variety of regional transportation connections. The 2040 General Plan notes that one of the greatest challenges is congestion on arterials like Contra Costa Boulevard and Taylor Boulevard, and I-680 interchange areas. Adding roadway lanes is not feasible nor would roadway expansion resolve congestion over the long term. Solutions like improving access to public transit and encouraging walking and bicycling may relieve congestion. Further, many residential and collector streets have discontinuous sidewalks, making it difficult to safely walk throughout Pleasant Hill. As adjacent parcels develop or redevelop, Pleasant Hill typically requires sidewalk improvements. However, where development is unlikely in the near-term, a prioritized plan for addressing these gaps in the network is needed.

The 2040 General Plan emphasizes the integration of land use and transportation as a major focus to reinforcing community cohesion and accessibility in the Land Use Element. Policies in the 2040 General Plan Land Use Element, as well as the Circulation Element, support Pleasant Hill in embracing changes to circulation issues created by land use choices by planning for the future and maintaining flexible land use regulations that embrace smarter land use planning around transportation. Providing this link between land use and transportation planning reduces the necessity for new high volume arterial roads that could otherwise physically divide communities.

The 2040 General Plan Land Use Element contains goals and policies, listed below, that would maintain existing communities within Pleasant Hill and ensure that established communities would not be divided by development facilitated by the 2040 General Plan.

Goal LU-1 Promote a city image that reflects the community's diversity, inclusivity, forward-thinking, and high quality of life.

- Policy LU-1.2 City Image. Continue efforts to define and enhance the City's image by emphasizing the high quality, intergenerational park facilities and recreational opportunities in the city; dedication to education, including the presence of Diablo Valley College and its potential to provide cultural and lifelong learning opportunities; and the vital, progressive nature of the city as a diverse residential community and a supportive environment for business.
- **Policy LU-1.3 Well-Defined Street Fronts.** Require new buildings to maintain a street front that creates or maintains a well-defined streetscape.
- **Policy LU-1.5 Public Amenities/Art.** Require installation of public art, landscaping, and/or other public amenities in conjunction with all new public and private development and major rehabilitation or expansion of existing development.
- **Policy LU-1.6 Transition in Scale.** Require that new development transition appropriately in building scale, height and massing in relation to the physical and visual character of adjoining neighborhoods.
- **Policy LU-1.8 Citywide Beautification.** Promote a clean and attractive city through periodic clean-up and beautification of commercial areas and neighborhoods.
- **Policy LU-1.9** Connectivity Between Existing and New Development. Encourage linking new development to existing development, parks, and trails through the creation of internal circulation systems that allow travel by foot, bicycles, vehicles, and other alternative modes of travel.

Goal LU-3 To provide a variety of housing types that offer choices for Pleasant Hill residents and create complete, livable neighborhoods.

- **Policy LU-3.1 Neighborhood Character.** Maintain and enhance the character and quality of existing residential neighborhoods, ensuring adequate public services and facilities maintained by the City such as streets and drainage are provided.
- **Policy LU-3.2 Connectivity.** Encourage new residential and mixed-use development to incorporate design features that promote walking within neighborhoods and citywide.

- **Policy LU-3.3 Neighborhood Access.** Ensure that new residential development include safe and convenient pedestrian and bicycle access to existing residential neighborhoods.
- **Policy LU-3.4 Clustering Development.** Encourage new residential development to be clustered to support increased densities, open space, and efficiencies of public facilities and services.
- Goal LU-4 To ensure that commercial and mixed-use development in the city is consistent with the overall community character and serves the existing and future needs of residents and visitors.
 - **Policy LU-4.1 Retail Center Enhancement.** Encourage new commercial uses to group into clustered areas or centers containing professional offices, retail sales and services. Clustered development shall locate at the intersections of major thoroughfares.
 - **Policy LU-4.3** Neighborhood Connectivity. Encourage commercial and mixed-use development to link to adjoining residential neighborhoods by incorporating well-designed and attractive streetscapes with sidewalks, bicycle paths, and street amenities.
- Goal LU-6 Create distinct and identifiable places for future development within Pleasant Hill that enhance community character, prosperity, and civic pride.
 - **Policy LU-6.4 Enhanced Connectivity.** Support the expansion of alternative transportation options including enhancements to the multi-use trail, expanded bike lanes along Golf Club Road, and additional connections between new and existing development.
 - **Policy LU-6.10 Cluster Development.** Promote clustered development on the Mangini-Delu site to allow for enhanced opportunities to preserve and/or create open space and resident amenities.
 - **Policy LU-6.16 Walkable Environment.** Enhance the pedestrian connections between Downtown, Crescent Drive, City Hall, and adjacent commercial centers along Contra Costa Boulevard.
 - **Policy LU-6.24 Flexible Development.** Ensure that zoning regulations in the Municipal Code pertaining to industrial development are flexible enough to facilitate the conversion of underperforming industrial sites, into higher intensive uses.
 - **Policy LU-6.25** Transit-Oriented Development. Encourage the design and development of transit-oriented developments along Contra Costa Boulevard to support future transportation system enhancements.
 - **Policy LU-6.49 Mobile Home Park Preservation.** Encourage private-sector investments to maintain the existing mobile home park and discourage the conversion of the mobile home park to alternative uses.
- Goal LU-7 Improve the health and well-being of all Pleasant Hill residents.
 - **Policy LU-7.3** Remove Physical Barriers. Remove or plan for ways to address physical barriers that bisect neighborhoods and discourage walking or biking.

These 2040 General Plan goals and policies would help maintain existing communities in Pleasant Hill and prevent division of established communities by development facilitated by the 2040 General Plan. Specifically, Goal LU-1 and associated policies would support strategic development that prioritizes connectivity, rehabilitation of existing development, and an overall well-maintained city. Goal LU-3 and associated policies encourages connected and accessible clustered neighborhoods that maintain neighborhood character. Policies LU-4.1, LU-4.3, LU-6.4, LU-6.10, and LU-7.3 further promote connected, clustered and accessible neighborhoods. Lastly, Policy LU-6.49 explicitly encourages maintenance of the existing mobile home park and discourages conversion to other uses.

Overall, the 2040 General Plan would promote orderly development in Pleasant Hill by encouraging growth in designated development focus areas and at infill sites near transit and other amenities while promoting the enhancement of the Pleasant Hill multimodal circulation system, maximizing connections, and minimizing barriers to connectivity. Therefore, the 2040 General Plan would not physically divide Pleasant Hill, and development facilitated by the 2040 General Plan would result in a less than significant impact.

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Less than significant without mitigation

Land Use Plans, Policies, and Regulations Consistency

Significance Criterion b: Would the proposed plan 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?

Impact LU-2 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD BE GENERALLY CONSISTENT WITH APPLICABLE LAND USE PLANS, POLICIES, OR REGULATIONS ADOPTED TO AVOID OR MITIGATE ENVIRONMENTAL EFFECTS, SUCH AS ABAG/MTC PLAN BAY AREA 2050. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to consistency with applicable land use plans and policies are limited to operational impacts. No respective construction impacts would occur from development facilitated by the proposed plan.

Operation

CONSISTENCY WITH THE PLEASANT HILL DOWNTOWN SPECIFIC PLAN

The PHDSP serves as a regulatory framework and development guide for land use in the downtown area of Pleasant Hill. The goal of the PHDSP is to develop a downtown that is a competitive retail and commercial center with an entertainment/recreational focus and sufficient public amenities to establish a sense of place and positive image for Pleasant Hill. Table 3.9-2 includes five relevant PHDSP guiding policies and analysis that addresses whether the 2040 General Plan would be consistent with the policies.

Table 3.9-2 2040 General Plan Consistency with PHDSP

PHDSP Guiding Policy	2040 General Plan Consistency
Encourage the development of a special retail environment in the Downtown for Pleasant Hill	Consistent. The 2040 General Plan includes policies that would encourage the development of Downtown as a special retail environment. For example, Policies LU-6.14, LU-6.17, and LU-6.19 call to enhance Downtown as a commercial, civic, and cultural capital of the city, in addition to being an entertainment hub with retail establishments. Further, Policy LU-6.15 supports the expansion of Downtown's commercial core, while Policy LU-6.16 aims to enhance the walkability of Downtown with adjacent commercial centers. Additionally, Policy E-1.1 encourages mixed-use development in Downtown.
2. Promote a compatible mix of retail, recreational, civic, office, and residential uses.	Consistent. As mentioned in the consistency analysis for PHDSP Guiding Policy 1 above, Policy LU-6.14 specifically calls to reinforce and enhance the identity of Downtown as the commercial, civic, and cultural center of Pleasant Hill.
3. Strongly encourage ground floor retail uses.	Consistent. The 2040 General Plan includes policies that would encourage retail uses in the Downtown area, which may include ground floor placements. Policy LU-4.1 encourages clustered areas of retail sales and services along intersections of major thoroughfares, which would include Downtown. Similarly, Policy LU-6.17 aims to enhance Downtown as an entertainment hub that includes retail establishments. Policy LC-2.7 calls development of a plan to improve access and safety for new and re-developed retail areas. Goal E-2 and associated policies would facilitate additional retail opportunities.
4. Develop a Downtown which complements the City Hall complex	Consistent . Policy LU-6.14 encourages reinforcement and enhancement of the identity of Downtown as the civic center of the city, which would involve development that complements the civic complex of City Hall. Further, Policy LU-6.16 supports enhancement of pedestrian connections around City Hall.
6. Establish a positive and unique image for Downtown.	Consistent . Policy LU-1.2 encourages efforts to define and enhance the City's imagine, which would encompass Downtown. Further, as identified under Guiding Policies 1 and 2, Policy LU-6.14 specifically calls to reinforce and enhance the identity of Downtown.

As shown in Table 3.9-2, the 2040 General Plan would be consistent with the guiding policies contained in the PHDASP.

CONSISTENCY WITH ABAG/MTC PLAN BAY AREA 2050

Plan Bay Area 2050 is a long-range land use and transportation plan for the San Francisco Bay Area region. The plan contains 11 overarching strategies with associated specific strategies that seek to promote healthy, safe, and equitable communities by reducing impacts from air pollution, protecting open space and agriculture, and increasing active transportation. 2040 General Plan consistency with such strategies in the Plan Bay Area 2050 are addressed below in Table 3.9-3.

Table 3.9-3 2040 General Plan Consistency with Plan Bay Area 2050 Goals

Plan Bay Area Strategies 2040 General Plan Consistency **Housing Strategies** H2. Preserve existing affordable housing. **Consistent.** The proposed 2040 General Plan Policy LU-7.5 promotes Acquire homes currently affordable to low affordable housing to allow aging residents to remain in their and middle-income residents for residences. Policies LU-3.7 and LU-4.7 encourage the provision of preservation as permanently deedaffordable housing when considering development proposals. Policy Hrestricted affordable housing. 1.4 facilitates inter-jurisdictional development of affordable housing. Goal H-3 and Policies H-3.1 through H-3.4 aim to increase housing opportunities for lower- and moderate-income households. Further, Goal H-6 and Policies H-6.1 through H-6.3 call to preserve the City's existing affordable housing stock. Therefore, the 2040 General Plan would be consistent with strategy H2. H3. Allow a greater mix of housing Consistent. 2040 General Plan Policy LU-6.31 and LU-6.53 supports densities and types in Growth vertical or horizontal mixed-use projects along Contra Costa Boulevard and Monument Boulevard, respectively. Further, Policy LU-4.5 **Geographies.** Allow a variety of housing types at a range of densities to be built in broadens the two aforementioned policies by encouraging vertical and horizontal mixed-use at key intersections and in neighborhoods that Priority Development Areas, select Transit-Rich Areas and select High-Resource Areas. provide additional amenities, which could involve Priority Development Areas, Transit-Rich Areas, and High-Resources Areas. The city currently contains mostly low-density residences, but Policy H-1.5 encourages development at the maximum allowed density. Therefore, the 2040 General Plan would be consistent with strategy H3. H4. Build adequate affordable housing to Consistent. Policies LU-3.7 and LU-4.7 encourage the provision of ensure homes for all. Construct enough affordable housing when considering development proposals. Policy Hdeed restricted affordable homes to fill the 1.4 facilitates inter-jurisdictional development of affordable housing. existing gap in housing for the unhoused Goal H-3 and Policies H-3.1 through H-3.4 aim to increase housing community and to meet the needs of lowopportunities for lower- and moderate-income households. Therefore, income households. the 2040 General Plan would be consistent with strategy H4. H6. Transform aging malls and office parks **Consistent.** Policy LU-6.54 supports the conversion of office sites along into neighborhoods. Permit and promote Ellinwood Way to multi-family and mixed-use residences and retail the reuse of shopping malls and office opportunities. Policy H-2.4 encourages mixed-use development in parks with limited commercial viability as commercial zones, specifically at underutilized sites. Therefore, the neighborhoods with housing for residents 2040 General Plan would be consistent with strategy H6. at all income levels. **Economic Strategies** EC4. Allow greater commercial densities in Consistent. 2040 General Plan Goal LU-4 and associated policies Growth Geographies. Allow greater encourages commercial and mixed-use development that is clustered densities for new commercial development and attractive to pedestrians and cyclists. Policies LU-6.26 and LU6.27 in select Priority Development Areas and support transforming "strip" commercial development into compact Transit-Rich Areas to encourage more jobs commercial development that is not auto-oriented. Therefore, the 2040 to locate near public transit. General Plan would be consistent with strategy EC4. EC6. Retain and invest in key industrial Consistent. Policy LU-6.21 supports enhancement of industrial sites, lands. Implement local land use policies to while Policy LU-6.22 supports development of expanded light industrial protect key industrial lands, identified as uses within the Hookston Industrial Area. Additionally, Policy TC-2.7 Priority Production Areas, while funding calls for a plan to improve access, circulation, and safety in industrial key infrastructure improvements in these areas. Therefore, the 2040 General Plan would be consistent with areas strategy EC6. Source: MTC/ABAG. 2021. Plan Bay Area 2050.

As shown in Table 3.9-3, the 2040 General Plan would be consistent with the goals contained in the Plan Bay Area 2050.

CONSISTENCY WITH THE CONTRA COSTA COUNTY ALUCP

Development facilitated by the 2040 General Plan in Pleasant Hill areas north of Gregory Lane and east of Pleasant Hill Road would be located within the Buchanan Field Airport Influence Area. The Buchanan Field Airport itself is located directly to the northeast of Pleasant Hill. As discussed in Section 3.9.3, *Regulatory Setting*, the Contra Costa ALUC would be responsible for review of the 2040 General Plan prior to approval by the City of Pleasant Hill, pursuant to ALUCP Policies 1.5.1 and 1.5.3. As such , future development facilitated by the proposed plan within the Buchanan Field Airport environs would be subject to additional review at the time of future development proposals. Additional noise and safety compatibility considerations regarding Buchanan Field Airport are discussed in Sections 3.10, *Noise*, and 3.7, *Hazards*, *Hazardous Materials*, & *Wildfire*, respectively.

2040 General Plan Hazards and Safety Element Goal HS-6 and associated policies, listed below, would ensure that development facilitated by the 2040 General Plan would be consistent with the ALUCP, and that coordination with Buchanan Field Airport with regard to land use considerations would occur.

- Goal HS-6 Ensure that airport operations do not adversely affect quality of life and safety for residents.
 - **Policy HS-6.1** Airport Land Use Compatibility Plan Adherence. Ensure consistency with the County Airport Land Use Compatibility Plan development restrictions.
 - **Policy HS-6.2** Airport Coordination. Coordinate with Buchanan Field Airport on land use considerations where compatibility issues may occur on the border of the airfield.

Implementation of the various 2040 General Plan goals and policies identified within this Impact LU-2 analysis would result in 2040 General Plan consistency with applicable, adopted, land use plans, regulations, and policies. Therefore, 2040 General plan operational impacts related to land use plans and policies consistency would be less than significant.

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Less than significant without mitigation

Unplanned Population Growth Inducement

Significance Criterion c: Would the proposed plan 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)?

Impact LU-3 IMPLEMENTATION OF THE PROPOSED PLAN WOULD FACILITATE THE CONSTRUCTION OF NEW HOUSING IN PLEASANT HILL. PROPOSED DEVELOPMENT COULD RESULT IN AN INCREASE IN POPULATION THAT WOULD EXCEED ABAG POPULATION FORECASTS BY 122 PERCENT BY 2040. HOWEVER, THE PROPOSED PLAN IS INTENDED TO ACCOMMODATE AND PLAN FOR POPULATION GROWTH. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to inducing substantial unplanned population growth in an area, either directly or indirectly are limited to operational impacts. No respective construction impacts would occur from development facilitated by the 2040 General Plan.

Operation

Table 3.9-4 presents population, dwelling units, and employment projections through 2040 (the 2040 General Plan horizon year) for Pleasant Hill (the General Plan area), based on Plan Bay Area 2040 estimates. The projections suggest that Pleasant Hill's population will grow approximately 5.6 percent between 2022 and 2040. This translates to an estimated 1,899 new residents by 2040. New dwelling units are expected to increase less than 0.1 percent between 2022 and 2040, for a total of 52 new units. Increased land uses and cultivation of a commercial business mix of uses that better serve residents needs and attract visitors is anticipated to increase employment by approximately 12.5 percent from 2022 levels, for a total of approximately 2,200 new jobs by 2040. This would increase the Pleasant Hill jobs-housing ratio by 7.7 percent.

Table 3.9-4 Plan Bay Area 2040 Pleasant Hill Population, Dwelling Units, and Employment

Pleasant Hill	2022	2040	Change 2022 to 2040	Percent Change 2022 to 2040
Population	34,026	35,925	1,899	5.6%
Dwelling Units	14,498	14,550	52	>.01%
Jobs	17,600	19,800	2,200	12.5%
Jobs-Household Ratio ¹	1.3	1.4	0.1	7.7%

¹Based on CDF estimates of 13,815 households in 2020 and 14,305 households projected in 2040. Sources: CDF. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State 2010-2022; ABAG. 2019. Projections 2040 by Jurisdiction; ABAG. 2021. Plan Bay Area 2040 Growth Pattern.

Development facilitated by the 2040 General Plan would result in approximately 19,216 net new residential units in Pleasant Hill through 2040. This additional housing, coupled with ongoing and planned development, would lead to an increase of approximately 46,119 net new residents in the City from 2022 to 2040, based on an estimated 2.4 persons per household. In the unlikely event that all potential buildout of the 2040 General Plan occurs, the total population of Pleasant Hill in 2040 would be 80,145, which is 123 percent above ABAG's 2040 population forecast of 35,925, as shown

in Table 3.9-4. However, the ABAG growth projection is based on the land use assumptions in the existing (2003) Pleasant Hill General Plan. Growth anticipated under the proposed 2040 General Plan is intended in part to meet regional housing needs over the long term. Although the 2040 General Plan would facilitate development beyond what is forecasted by ABAG, it would bring the forecasts for the Pleasant Hill General Plan and RTP/SCS into consistency when the RTP/SCS is next updated to reflect new forecasts for each city in the region. Note that growth assumptions within this EIR are conservative and potentially unlikely to come to complete fruition, and accordingly future RTP/SCS forecasts may provide more realistic growth assumptions, which would be lower than the growth presented here.)

Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply, the additional units under the 2040 General Plan would further assist in addressing the existing crisis and meeting the housing needs of Pleasant Hill communities.

The increase in affordable housing units would provide housing opportunities in proximity to jobs for those employed in Contra Costa County that earn below median household income categories. Most of those employed in Pleasant Hill commute from areas outside Pleasant Hill and affordable housing units would provide for a better balance of jobs and housing in the region.

As shown on Table 3.9-4, Pleasant Hill has a current jobs-household ratio of 1.3; this means that there are not enough households in Pleasant Hill to support employment opportunities and that workers must commute to Pleasant Hill. Growth facilitated by the 2040 General Plan would result in a more balanced jobs-household ratio by 2040 by increasing the number of residential units available in Pleasant Hill (Table 3.9-4). Therefore, such growth would not result in substantial adverse effects associated with an increased imbalance of jobs and housing in Pleasant Hill.

The following 2040 General Plan Land Use and Transportation and Circulation Element policies would encourage integration of development into surrounding neighborhoods and existing land use patterns, increasing the orderly nature of growth induced by the 2040 General Plan:

- **Policy LU-1.6** Transition in Scale. Require that new development transition appropriately in building scale, height and massing in relation to the physical and visual character of adjoining neighborhoods.
- **Policy LU-6.9** Transition between Surrounding Development. Require development of the Mangini-Delu site to incorporate design and development techniques meant to implement a seamless transition between existing residential neighborhoods and proposed development.
- **Policy LU-6.38 Neighborhood-Serving Mixed-Use.** Encourage the development of Gregory Lane to attract low-intensity neighborhood-serving mixed-use development.
- **Policy LU-6.39 Development Compatibility.** Require Gregory Lane mixed-use projects to apply design and development techniques to ensure a seamless transition between adjacent low-density residential.
- **Policy LU-6.42 Neighborhood-Serving Mixed-Use.** Encourage the development of Oak Park Boulevard to attract low-intensity neighborhood-serving mixed-use development.
- **Policy LU-6.43 Development Compatibility.** Require Oak Park Boulevard mixed-use projects to apply design and development techniques to ensure a seamless transition between adjacent low-density residential.

Policy TC-4.4 Infill Development. Support infill and development in existing urban areas and around key transit facilities.

Finally, one purpose of the 2040 General Plan is to direct future development in such a way as to minimize the impacts of growth by emphasizing the intensification and reuse of already developed areas, thus minimizing pressure to develop on the remaining open space in Pleasant Hill and directing growth and development to infill areas. Because the 2040 General Plan is designed for planned and orderly growth, and residential development would be completed in accordance with State law, development facilitated by and in accordance with the 2040 General Plan would not directly or indirectly induce substantial unplanned growth in Pleasant Hill. Therefore, operational 2040 General Plan impacts related to substantial unplanned population growth would be less than significant.

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Less than significant without mitigation

Population or Housing Displacement

Significance Criterion d: Would the proposed plan displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact LU-4 DEVELOPMENT FACILITATED BY THE PROPOSED PLAN WOULD NOT RESULT IN THE DISPLACEMENT OF SUBSTANTIAL NUMBERS OF HOUSING OR PEOPLE. THE PROPOSED PLAN WOULD FACILITATE THE DEVELOPMENT OF NEW HOUSING IN ACCORDANCE WITH STATE AND LOCAL HOUSING REQUIREMENTS, WHILE PRESERVING EXISTING RESIDENTIAL NEIGHBORHOODS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to displacement of substantial existing people or housing are limited to operational impacts. No respective construction impacts related to population or housing displacement would occur from development facilitated by the proposed plan.

Operation

2040 GENERAL PLAN

"Substantial" displacement would occur if allowed land uses would displace more residences than would be accommodated through growth facilitated by the 2040 General Plan. The 2040 General Plan would accommodate new development in the General Plan area under land use designations that encourages higher-density and mixed-use projects. Full buildout of the 2040 General Plan would result in 19,216 net new housing units by 2040. The types of housing units anticipated under the 2040 General Plan would generally fall into the following categories of development projects: single-family, multi-family residential, and/or mixed-use development, development of existing nonresidential, and residential sites that would allow residential use or higher density residential use.

Development in the General Plan area would not result in significant displacement of existing residences in order to accommodate the planned increase in development intensity considering that existing residences are not proposed for demolition. In addition, the 2040 General Plan would facilitate the development of 19,216 net new dwelling units throughout the General Plan area. As such, the 2040 General Plan would not result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere. Therefore, operational 2040 General Plan impacts related to population or housing displacement would be less than significant.

Mitigation Measures

No mitigation is required.

Significance After Mitigation

Less than significant without mitigation

3.9.5 Cumulative Impacts

The geographic scope of the cumulative land use/planning and population/housing analysis is the City of Pleasant Hill and adjacent city and airport planning areas. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future projects located in Pleasant Hill (in addition to the proposed plan) and the City of Concord listed in Table 3-1 (refer to Chapter 3, Environmental Impact Analysis), as well as plans in Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County, and Plan Bay Area 2050.

Community Division

Development facilitated by the proposed plan in conjunction with the cumulative plans and projects listed in Table 3-1 would result in the development of residential, retail, office, hotel, industrial, and transportation uses. The cumulative plans and projects do not propose the type of large or linear construction that could reduce mobility within an existing community and the surrounding area and would occur in an urban environment. Therefore, the cumulative impact related to potential to divide an existing community would be less than significant.

Land Use Plan, Policy, or Regulation Consistency

Land use decisions for both the proposed plan and for the other cumulative plans and projects listed in Table 3-1 are made at the City level. Development within the City of Pleasant Hill is governed by the Pleasant Hill General Plan and Pleasant Hill Municipal Code, which ensure logical and orderly land use development and require discretionary review to ensure that projects do not result in land use environmental impacts due to inconsistency with the General Plan and other regulations. Cumulative development projects in Pleasant Hill would be required to demonstrate consistency with the proposed 2040 General Plan and applicable codes, ordinances, and policies. This would ensure that these projects comply with applicable planning regulations. The proposed plan has been determined to be consistent with the City's policy. Therefore, the cumulative impact related to potential 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.

Population Growth

Cumulative projects listed in Table 3-1 in conjunction with the proposed plan would add residents to the cities of Pleasant Hill, Concord, Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, and Moraga, unincorporated Contra Costa County, and the greater Bay Area. The CDF estimates that the total population of Pleasant Hill was 34,026 as of January 1, 2022. 14 The development of other cumulative plans and projects include residential projects that would add additional housing units resulting in additional residents. This increase in population would be in addition to the approximately 45,470 residents associated with the proposed plan. The proposed plan estimates Pleasant Hill at buildout to have a population of 80,145 people by 2040. Because the proposed plan is designed for planned and orderly growth, and residential development would be completed in accordance with State law, development facilitated by and in accordance with the proposed plan would not directly or indirectly induce substantial unplanned growth in Pleasant Hill. As such, while other cumulative plans and projects would result in direct population growth, implementation of the proposed plan, in conjunction with other cumulative projects, would result in a less than significant cumulative impact associated with direct population growth, as this growth is planned for by the City of Pleasant Hill. Furthermore, cumulative plans and projects are expected to generate employment opportunities. Total employment in Pleasant Hill was 17,600 in 2022. The cumulative plans and projects are estimated to increase employment, and the proposed plan is expected to increase jobs in Pleasant Hill by 2,200. Employees associated with the cumulative plans and projects would be expected to be drawn from the local labor force. The proposed plan is not expected to employ new employees. As such, there would not be substantial indirect population growth associated with implementation of the cumulative plans and projects. Therefore, cumulative impacts related to direct and indirect population growth would be considered less than significant.

Population/Housing Displacement

Cumulative plans and projects listed in Table 3-1 in conjunction with implementation of the proposed plan would add residential units to Pleasant Hill. The plans and projects listed in Table 3-1 would not remove existing housing and rather would add housing units. Furthermore, the development facilitated by the proposed plan would add approximately 14,550 housing units to the Pleasant Hill housing stock. In addition, implementation of the proposed plan would not require the removal of any homes and would not displace any people. As such, implementation of the proposed plan, in conjunction with other cumulative plans and projects, would not displace housing or people such that it would necessitate the construction of additional housing elsewhere. Therefore, no cumulative impact related to displacement of housing or people would occur.

Overall Level of Cumulative Significance Less than significant

¹⁴ CDF. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State 2010-2021. Available: https://dof.ca.gov/Forecasting/Demographics/Estimates/. (accessed November 2022)

3.10 Noise

3.10.1 Introduction

This section describes the existing conditions related to noise and vibration within the General Plan area as well as the regulatory framework. This section also evaluates the possible impacts related to noise and vibration that could result from implementation of the 2040 General Plan. Information included in this section is based on the Pleasant Hill General Plan, as well as transportation volume data drawn from the Pleasant Hill 2040 General Plan Transportation Impact Analysis (TIA), which is included as Appendix E to this EIR.

3.10.2 Environmental Setting

Characteristics of Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of roadway vehicle volume, would increase the noise level by 3 dBA; reducing the energy in half would result in a 3 dBA decrease. Table 3.10-1 shows some representative noise sources and their corresponding noise levels in dBA.

Table 3.10-1 Typical A-Weighted Noise Levels

ndoor Noise Source	Noise Level (dBA)	Outdoor Noise Sources
Threshold of Hearing in Laboratory)	0	_
orary	30	Quiet Rural Nighttime
frigerator Humming	40	Quiet Suburban Nighttime
uiet Office	50	Quiet Urban Daytime
ormal Conversation at 3 feet	60	Normal Conversation at 3 feet
cuum Cleaner at 10 feet	70	Gas Lawn Mower at 100 feet
r Dryer at 1 foot	80	Freight Train at 50 feet
od Blender at 3 feet	90	Heavy-duty Truck at 50 feet
ide Subway Train (New York)	100	Jet Takeoff at 2,000 feet
oke Detector Alarm at 3 feet	110	Unmuffled Motorcycle

¹ California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. (CT-HWANP-RT-13-069.25.2) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS Sept 2013B.pdf (accessed October 2022).

² Crocker, Malcom. 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH, October.

Indoor Noise Source	Noise Level (dBA)	Outdoor Noise Sources
Rock Band near stage	120	Chainsaw at 3 feet
_	130	Military Jet Takeoff at 50 feet
_	140	(Threshold of Pain)
Source: Data compiled by Rincon in 2022.		

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible; and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud.

Sound changes in both level and frequency spectrum as it travels from the source to the receptor. The most obvious change is the decrease in level as the distance from the source increases. The manner in which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance. The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees). Noise levels may also be reduced by intervening structures. The amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can substantially alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receptor.³ Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-tointerior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest root mean squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period.

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to

³ Federal Highway Administration (FHWA). 2011. *Highway Traffic Noise: Analysis and Abatement Guidance*. (FHWAHEP-10-025). December. Available at: https://www.codot.gov/programs/environmental/noise/assets/fhwa-noise-guidance-dec-2011 (accessed October 2022).

7:00 a.m.) hours; it is also measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. Noise levels described by Ldn and CNEL usually differ by about 1 dBA or less. The relationship between the peak-hour Leq value and the L_{dn}/CNEL depends on the distribution of roadway noise during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60-plus CNEL range. Normal conversational levels are in the 60 to 65dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations.⁴ Table 3.10-2 briefly defines measurement descriptors and other sound terminology used in this section.

Table 3.10-2 Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound-pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Maximum and Minimum Noise Levels (L _{max} and L _{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L _{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.

Characteristics of Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hertz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body is from a low of less than 1 Hertz up to a

⁴ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-impact-assessment-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovation/128131/transit-noise-and-vibration-innovmanual-fta-report-no-0123_0.pdf (accessed October 2022).

high of about 200 Hertz.⁵ Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration.

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hertz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source.⁶

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances. When a building is impacted by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV). The PPV is normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration and other construction activity because it is related to the stresses that are experienced by buildings. Table 3.10-3 summarizes the vibration damage criteria recommended by the FTA for evaluating the potential for architectural damage to buildings.

Table 3.10-3 Criteria for Vibration Damage Potential

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity

Source: Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: 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 October 2022).

⁵ Crocker, Malcolm J. (Editor). 2007. Handbook of Noise and Vibration Control Book. ISBN: 978-0-471-39599-7, Wiley-VCH. October 2007.

⁶ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: 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 October 2022).

⁷ Caltrans. 2020 *Transportation and Construction Vibration Guidance Manual*. (CT-HWANP-RT-20-365.01.01) September. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf (accessed October 2022)

⁸ Caltrans. 2020 *Transportation and Construction Vibration Guidance Manual*. (CT-HWANP-RT-20-365.01.01) September. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf (accessed October 2022).

Noise-Sensitive Land Uses

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise-sensitive land uses are typically defined as single and multi-family residential; hotels and motels; group homes, hospital and extended medical facilities; churches; schools and other learning institutions; and libraries. Sensitive land uses generally should not be subjected to noise levels that would be considered intrusive in character.

General Plan Area

Noise-sensitive land uses are located throughout Pleasant Hill, as it is a predominantly residential city. Residential development is located between Taylor Boulevard and Contra Costa Boulevard and the southern edge of Pleasant Hill, with residential development also located north of Taylor Boulevard between Alhambra Avenue and the Contra Costa County Club. Pleasant Hill also includes noise-sensitive land uses such as hotels and motels; group homes; churches; schools and other learning institutions; and libraries.

Existing Noise Conditions and Sources

General Plan Area

The predominant source of noise in Pleasant Hill, as in most communities, is motor vehicles. Motor vehicle noise is characterized by a high number of individual events that can create a sustained noise level in proximity to noise-sensitive uses. Roadways with the highest roadway vehicle volumes and speeds produce the highest noise levels. The roadways in Pleasant Hill with the highest roadway vehicle volumes and, thus, the highest noise levels are I-680, Contra Costa Boulevard, Taylor Boulevard, and Monument Boulevard. Table 3.10-4 provides existing roadway vehicle noise along roadways in the plan area.

Table 3.10-4 Existing Roadway Vehicle Noise Along Roadway Segments

Roadway Segment	Existing ADT	Existing Roadway Vehicle Noise Level at 50 feet (dBA CNEL)
Pacheco Boulevard – North of 1st Avenue	17,000	66.8
Center Avenue – West of Pacheco Boulevard	8,000	63.4
Chilpancingo Parkway – West of Pacheco Boulevard	17,800	65.9
Contra Costa Boulevard – South of Concord Avenue	30,000	67.8
Golf Club Road – West of Pacheco Boulevard	13,100	64.2
Morello Avenue – North of Paso Nogal Road	8,600	63.8
Paso Nogal Road – East of Morello Avenue	3,900	56.9
Paso Nogal Road – East of Alhambra Avenue	5,000	56.3
Viking Drive – West of Contra Costa Boulevard	7,200	58.4
Morello Avenue – South of Viking Drive	8,800	61.1
Norse Drive – North of Taylor Boulevard	6,500	59.1
Taylor Boulevard – West of Contra Costa Boulevard	23,200	70.4
Contra Costa Boulevard – North of Beth Drive	21,600	68.1
Ellinwood Drive – East of Contra Costa Boulevard	8,200	60.1

Roadway Segment	Existing ADT	Existing Roadway Vehicle Noise Level at 50 feet (dBA CNEL)
Lucille Lane – North of Maureen Lane	3,100	55.9
Taylor Boulevard – East of Alhambra Avenue	19,800	69.4
Pleasant Hill Road – North of Taylor Boulevard	27,200	69.8
Taylor Boulevard – West of Alhambra Avenue	19,000	72.3
Pleasant Hill Road – North of Grayson Road	15,900	66.7
Taylor Boulevard – South of Grayson Road	21,600	69.9
Gregory Lane – East of Pleasant Hill Road	13,300	64.3
Gregory Lane – West of Cleaveland Road	16,700	65.6
Cleaveland Road – South of Gregory Lane	9,300	61.9
Contra Costa Blvd – North of Monument Boulevard	30,600	70.5
Boyd Road – West of Cleaveland Road	16,700	63.2
Monument Boulevard – East of Buskirk Avenue	45,300	71.0
Buskirk Avenue – South of Monument Boulevard	25,800	66.4
Hookston Road – East of Buskirk Avenue	14,100	63.9
Buskirk Avenue – South of Mayhew Way	8,900	61.6
Oak Park Boulevard – West of Hook Avenue	14,400	64.0
Patterson Boulevard – North of Oak Park Boulevard	5,500	59.6
Pleasant Hill Road – North of Oak Park Boulevard	8,200	64.2
Oak Park Blvd – East of Pleasant Hill Road	10,500	63.9
Geary Road – East of Pleasant Hill Road	12,600	64.9
Taylor Boulevard – South of Withers Avenue	22,500	73.0
ADT = average daily trips Source: Data provided by Fehr & Peers in 2022.		

Figure 3.10-1 shows the existing 60, 65, and 70 dBA CNEL noise contours from roadways and highways in the plan area.

Airport noise associated with Buchanan Field Airport operations is an additional noise source in Pleasant Hill. The Buchanan Field Airport is located just outside the northeast corner of the Pleasant Hill city limits, with flightpaths from the Buchanan Field Airport southwestern to northeastern runways located over Pleasant Hill. Aircraft following these flightpaths generate noise over Pleasant Hill. The airport influence area extends approximately 2.5 miles from the runways and includes most of Pleasant Hill north of Boyd Road. Airport noise contours are shown in Figure 3.10-2.

The Bay Area Rapid Transit (BART) Antioch-SFO/Millbrae line is another source of noise in the plan area. While BART noise may be audible at times in the plan area, it is not a substantial source of noise since the rapid transit line is approximately 850 feet southeast of the plan area.

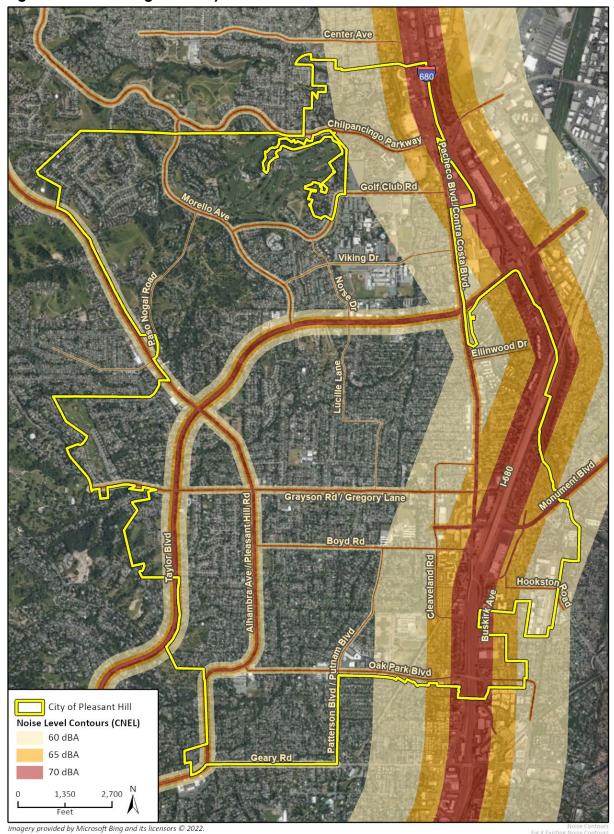
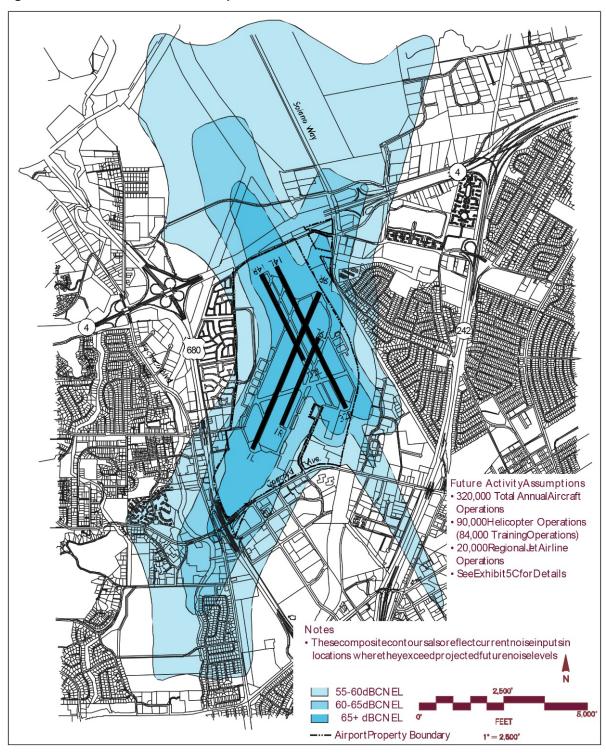


Figure 3.10-1 Existing Roadway Vehicle Noise Contours

Figure 3.10-2 Buchanan Field Airport Noise Contours



Source: Contra Costa County Airport Land Use Commissions. 2000. Contra Costa County Airport Land Use Compatibility Plan. https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC (accessed October 2022).

3.10.3 Regulatory Framework

Federal Regulations

Department of Housing and Urban Development

The federal Department of Housing and Urban Development (HUD) sets environmental criteria and standards in Title 24 of the Code of Federal Regulations (CFR), Part 51. New construction proposed in areas that exceed 65 dBA L_{dn} must incorporate noise attenuation features to maintain interior noise levels at 45 dBA L_{dn}. Development in areas exceeding 65 dBA L_{dn} requires further attenuation features. In general, the HUD regulations match the California state regulations discussed below.

Federal Transit Administration

The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For residential uses, the daytime noise threshold is 80 dBA Leq for an 8-hour period.

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Noise limitations would apply to the operation of construction equipment and could also apply to any proposed industrial land uses. Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan, as required under OSHA, and is not addressed further in this analysis.

Federal Aviation Administration

The Federal Aviation Administration (FAA) enforces Title 14, Part 150 of the CFR, which governs airport noise compatibility programs and identifies land uses that are normally compatible with various levels of noise exposure. The FAA has determined that sound levels up to 45 dB CNEL are acceptable within residential buildings. As discussed in Section 3.10.2, *Environmental Setting*, flightpaths from the Buchanan Field Airport are located over Pleasant Hill and would require implementation of the FAA standards.

State Regulations

California General Plan Guidelines

State law requires general plans to include a Noise Element under Government Code Section 65302(f). The California General Plan Guidelines, published by the Governor's Office of Planning and Research, indicate acceptable, specific land use types in areas with specific noise exposure. The guidelines also offer adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. These guidelines are advisory, and local jurisdictions have the authority to set specific noise standards based on local conditions.

California Building Code

California Code of Regulations Title 24, Building Standards Administrative Code, Part 2, Chapter 12, and the California Building Code codify the State noise insulation standards. These noise standards apply to new construction in California to control interior noise levels as they are affected by exterior noise sources and interior noise sources from separate areas. The regulations specify that interior noise levels shall not exceed 45 dB CNEL/L_{dn} in any habitable room, as well as specifying sound transmission class requirements for walls, floors, and ceilings around sleeping units.

California Green Building Code

California Green Building Standards Code 2019 (CALGreen) Section 5.507.4, Acoustical Control, regulates construction of non-residential uses within the 65 dBA CNEL/ L_{dn} contour of an airport, freeway, expressway, railroad, industrial noise source, or other fixed source. According to Section 5.507.4.1.1 "buildings exposed to a noise level of 65 dB L_{eq} (1-hr) during any hour of operation shall employ sound-resistant assemblies as determined by a prescriptive method (CALGreen Section 5.507.4.1) or performance method (CALGreen Section 5.507.4.2).

Projects may demonstrate compliance through the prescriptive method if wall and roof-ceiling assemblies exposed to the noise source meet a composite sound transmission class (STC) rating of at least 50 or a composite outdoor/indoor transmission class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30. Projects may demonstrate compliance through the performance method if wall and roof-ceiling assemblies exposed to the noise source are constructed to provide an interior noise environment that does not exceed 50 dB L_{eq-1Hr} in occupied areas during hours of operations.

California Airport Noise Standards

California Code of Regulations Title 21, Subchapter 6, Airport Noise Standards, establishes 65 dBA CNEL as the acceptable level of aircraft noise for persons living in the vicinity of airports. Noise-sensitive land uses are generally incompatible in locations where the aircraft exterior noise level exceeds 65 dBA CNEL. This standard remains unless an aviation easement for aircraft noise has been acquired by the airport proprietor, or the residence is a high-rise with an interior CNEL of 45 dBA or less in all habitable rooms. Assembly Bill (AB) 2776 requires any person who intends to sell or lease residential properties in an airport influence area to disclose that fact to the person buying the property.

Local Regulations

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains land use compatibility categories for community noise exposure, noise contour maps, and policies related to noise, but the categories for noise exposure, noise contour maps, and policies would be replaced by the proposed 2040 General Plan.

Pleasant Hill Municipal Code

Chapter 9.15 of the Pleasant Hill Municipal Code contains a noise ordinance. Relevant sections in the noise ordinance include the following:

- Chapter 9.15, Section 9.1 5.040.H.: Special noise sources Machinery, equipment, fans, and air conditioning. It is unlawful for a person to operate machinery, equipment, a pump, fan, air-conditioning apparatus or similar mechanical device in the manner which creates noise, unless the noise is muffled and the device is equipped with a muffler sufficient to deaden the noise.
- Chapter 9.15, Section 9.1 5.040.L.: Special noise sources Construction of building and projects. It is unlawful for a person within a residential land use district to operate or perform construction or repair work on a building, structure or project, or to operate a pile driver, steam shovel, pneumatic hammer, derrick, steam of electric hoist, or other construction-type device on city-recognized holidays as designated by city council resolution, and on Monday through Friday, prior to 7:30 a.m. and after 7:00 p.m. on each day and on Saturday and Sundays, prior to 9:00 a.m. and after 6:00 p.m. The above prohibition does not apply to emergency work.

Chapter 18.50 of the Pleasant Hill Municipal Code includes maximum noise standards by zoning district. Relevant sections include the following:

Chapter 18.50, Section 18.50.060: Performance standards.

All uses and activities shall comply with the Pleasant Hill noise regulations (PHMC Chapter 9.15), and no use shall create ambient noise levels measured at the property line which exceed the standards in Table 3.10-5.

Table 3.10-5 Maximum Noise Standards by Zoning District

	Zone of Property Receiving Noise	Maximum Noise Level L _{dn} or CNEL, dB
R, NB	Residential and Neighborhood Business Districts	50
RB, C	Commercial and Retail Business Districts	60
PAO	Office District	65
LI	Industrial District	70
PUD, PPD	Planned Development/Precise Plan District	Study Required

Source: Schedule 18.50.060, Pleasant Hill Municipal Code

Notes:

Where noise is measured at the property line of abutting districts, the noise standard for the more restrictive district applies.

- Duration and timing. The noise standards above shall be modified as follows to account for the effects of time and duration on the impact of noise levels:
 - a) In residential zones, the noise standard shall be five dB lower between 10:00 p.m. and 7:00 a.m.
 - b) Noise that is produced for no more than a cumulative period of five minutes in any hour may exceed the standards above by five dB.
 - c) Noise that is produced for no more than a cumulative period of one minute in any hour may exceed the standards above by 10 dB.
- Zoning administrator may require acoustic study. The zoning administrator may require an acoustic study for any proposed project which could have or create a noise exposure greater than that deemed acceptable. For any study required, noise shall be measured with a sound level meter which meets the standards of the American National Standards Institute (ANSI Section S1.4-1979, Type 1 or Type 2). Noise levels shall be measured in decibels from the property line. The unit of measure shall be designated as dB. A calibration check shall be made of the instrument at the time any noise measurement is made.
- Noise attenuation measures. The zoning administrator may require the incorporation into a project of any noise attenuation measures deemed necessary to ensure that noise standards are not exceeded.

Contra Costa County Airport Land Use Compatibility Plan

The Contra Costa County Airport Land Use Compatibility Plan is intended to promote compatibility between the airports in Contra Costa County and the land uses which surround them. As previously discussed, the Buchanan Field Airport is located just outside the northeast corner of the Pleasant Hill city limits. The operation of the Buchanan Field Airport affects development in Pleasant Hill through the enforcement of overlay and safety zones, which functionally creates restrictions on development within the vicinity of the airport based on proximity to the airport and flight path. Portions of Pleasant Hill are located in Safety Zone 4, which limits buildings to have no more than four habitable floors above ground. Additionally, per policy 5.2.2, new single-family, duplex, and mobile home residential uses are considered normally acceptable up to 55 dB CNEL and marginally acceptable at exposures between 55 and 65 dB CNEL. Per policy 5.2.3, new multi-family residential developments are normally acceptable up to 60 dB CNEL and marginally acceptable at exposures between 60 and 65 dB CNEL.

3.10.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Noise.

Would the 2040 General Plan:

- a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generate excessive groundborne vibration or groundborne noise levels?
- c) If 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

Construction Noise

Construction noise levels that could occur with implementation of the 2040 General Plan are based on reference noise levels published by the FTA.

Stationary On-Site Operational Noise

Stationary noise (i.e., on-site operational noise) were analyzed in context of typical mechanical equipment on commercial, industrial, residential and mixed-use development such as heating, ventilation, and air conditioning (HVAC) units.

Mobile Off-site Operational Noise

Roadway vehicle noise levels for the 2040 General Plan were estimated using the FHWA roadway vehicle noise prediction model methodology. Roadway vehicle noise impacts are analyzed based on

⁹ Contra Costa County Airport Land Use Commissions. 2000. Contra Costa County Airport Land Use Compatibility Plan. https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC (accessed October 2022).

average daily trip (ADT) roadway volume for existing conditions and General Plan 2040 Buildout, as well as speeds, and number of lanes data. ¹⁰ The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, roadway vehicle volumes, vehicle speeds, car/truck mix, number of lanes, and road width.

Groundborne Vibration

Development facilitated under the 2040 General Plan would not include substantial vibration sources associated with operation. Construction activities have the greatest potential to generate groundborne vibration affecting nearby noise-sensitive receptors. Construction vibration levels that could occur due to buildout of the 2040 General Plan are based on reference vibration levels published by the FTA.

EIR Scoping Comments Consideration

No comments relevant to CEQA were received in response to the EIR NOP specific to noise and vibration that need to be addressed in the impacts discussion.

Specific Thresholds of Significance

For purposes of this analysis, the following thresholds of significance are used to evaluate the significance of noise and vibration resulting from implementation of the proposed plan.

Construction Noise

Development facilitated by the 2040 General Plan could have a significant impact if temporary construction noise during permitted daytime hours exposed noise-sensitive receivers to significantly adverse noise levels, or if construction noise occurred outside the hours detailed in Municipal Code Section 9.1 5.040.L. As the City does not define a quantitative construction noise threshold, for purposes of analyzing impacts from the project, the City has determined that the FTA construction criteria are applicable to the project. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual*. For residential uses, the daytime noise threshold is 80 dBA Leq(8hr) for an 8-hour period. Construction noise would be significant if it exceeds this threshold.

Stationary On-site Operational Noise

Stationary on-site operational noise impacts were analyzed using the City's maximum noise standards for each zoning district as shown in Table 3.10-5 above.

Mobile Off-site Operational Noise

A project normally has a significant effect on the environment related to noise if it substantially increases the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions. Changes of 1 to 3 dBA are detectable under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of

¹⁰ Roadway vehicle segment volumes and data from Fehr & Peers collected in 2019 were used as existing conditions for analysis purposes. The City determined that roadway vehicle data collected in 2019 provided a more conservative baseline compared to data during the COVID-19 pandemic.

¹¹ Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: 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 October 2022).

5 dBA is readily discernible to most people in an exterior environment. Based on this, the following thresholds of significance are used to assess roadway vehicle noise impacts at sensitive receiver locations:

- Greater than 1.5 dBA increase for ambient noise environments of 65 dBA CNEL and higher
- Greater than 3 dBA increase for ambient noise environments of 60-64 CNEL
- Greater than 5 dBA increase for ambient noise environments of less than 60 dBA CNEL

Exposure to Aircraft Noise

For a plan or 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, if the plan or project exposes people residing or working in the project area to excessive noise levels such as noise levels exceeding normally acceptable noise levels in the 2040 General Plan.

Vibration

The City has not adopted a significance threshold to assess vibration impacts during construction and operation. Therefore, criteria from the FTA are used to evaluate potential construction vibration impacts related to potential building damage from construction. ¹² Construction vibration impacts from development would be significant if vibration levels exceed the FTA criteria shown in Table 3.10-3 above.

Impact Evaluation

Ambient Noise Compared to Standards

Significance Criterion a: Would the proposed plan 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?

Impact NOI-1 Construction of individual projects facilitated by the 2040 General Plan would temporarily increase noise levels, potentially affecting nearby noise-sensitive land uses. Development facilitated by the 2040 General Plan would also introduce new noise sources and contribute to increases in operational noise. The continued regulation of noise, consistent with the City Code and implementation of proposed 2040 General Plan policies would minimize disturbance to adjacent land uses. However, construction and operational mobile noise could exceed standards. This impact would be significant and unavoidable even with mitigation.

Construction

Noise from individual construction projects facilitated by the 2040 General Plan would temporarily increase noise levels at nearby noise-sensitive receptors. Since at this stage of planning, project-level details are not available for future projects that would be carried out under the 2040 General Plan, it is not possible to determine exact noise levels, locations, or time periods for construction of

¹² Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: 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 October 2022).

such projects, or construction noise at adjacent properties. However, noise estimates for typical construction activities have been provided below.

Construction activities would generate noise from phases such as demolition, site preparation, grading, building construction, and paving activities. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., demolition, site preparation, and grading work) and would be lower during the later construction phases (i.e., building construction and paving). Table 3.10-6 illustrates typical noise levels associated with construction equipment at a distance of 50 feet and 100 feet.

Table 3.10-6 Typical Noise Levels for Construction Equipment

	Estimated Noise L Sensitive Recep	
Equipment	50 feet	100 feet
Air Compressor	80	74
Backhoe	80	74
Concrete Mixer	85	79
Dozer	85	79
Grader	85	79
Jack Hammer	88	82
Loader	80	74
Paver	85	79
Pile-drive (Impact)	101	95
Pile-driver (Sonic)	95	89
Roller	85	79
Saw	76	70
Scarified	83	77
Scraper	85	79
Truck	84	78

Source: Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: 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 October 2022).

Neither the Pleasant Hill Municipal Code nor the 2040 General Plan contain quantitative limits for construction noise. In lieu of City-specific standards, the FTA criteria for assessing construction noise impacts are used. For residential uses, the FTA daytime noise threshold is 80 dBA $L_{eq~(8~hour)}$ for an 8-hour period.

Noise would typically drop off at a rate of about 6 dBA per doubling of distance. Therefore, noise levels would be about 6 dBA lower than shown in Table 3.10-6 at 200 feet from the noise source and 12 dBA lower at a distance of 400 feet from the noise source. As shown in these noise levels,

construction noise may exceed the FTA's daytime noise threshold, depending on the equipment used and the distance in which the equipment is operating compared to noise-sensitive receptors.

Since at this stage of planning, project-level details are not available for future projects that would facilitated by the 2040 General Plan, it is not possible to determine exact noise levels, locations, or time periods for construction of such projects, or construction noise at adjacent properties. Therefore, construction noise levels associated with future projects may exceed the FTA's daytime construction noise limits, and impacts would be potentially significant.

Implementation of Mitigation Measure NOI-1 would reduce 2040 General Plan construction noise impacts associated with future discretionary projects in Pleasant Hill. However, as exact details of future project-specific construction activities are unknown at this stage of planning, construction noise could still exceed the daytime significance threshold or potentially need to occur during the more sensitive nighttime hours for concrete pours or pumps that need to run overnight for water resources projects. Implementation of Mitigation Measure NOI-1 would not ensure that construction noise impacts would be reduced to below the significance threshold of 80 dBA L_{eq} during the daytime at residential uses and other sensitive receptors in all cases. Therefore, the 2040 General Plan construction noise impact would be significant and unavoidable. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level. .

Operation

STATIONARY OPERATIONAL NOISE

Stationary sources of noises may occur on all types of land uses. Residential uses would generate noise from landscaping, maintenance activities, and mechanical equipment such as ground-level and rooftop ventilation and heating (HVAC) systems. Commercial uses would generate noise from HVAC systems, loading docks, and other sources. Industrial uses may generate noise from HVAC systems, loading docks, and possibly machinery. Other noise generated by residential or commercial uses such as conversations and parking lot activity is generally short and intermittent. Industrial uses may generate noise on a more continual basis. Nightclubs, outdoor dining areas, gas stations, car washes, fire stations, drive-throughs, swimming pool pumps, school playgrounds, athletic and music events, and public parks are other common noise sources. The proposed Hazards and Safety Element contains goals, policies, and programs that require local planning and development decisions to consider noise-related impacts from stationary sources.

The following proposed General Plan 2040 goal, policies, and programs would minimize potential adverse noise-related impacts from stationary sources.

- Goal HS-7 Ensure the community is protected from noise that interferes with human activity or causes health problems.
 - **Policy HS-7.1 Noise Level Standards.** Require new development to be designed and constructed to meet acceptable noise level standards adopted by the City.
 - **Policy HS-7.2 Noise Impact Mitigation.** Evaluate the noise impacts of new development based on the potential for significant increases in noise levels, in addition to compliance with acceptability standards and require mitigation, if necessary, to comply with City noise standards.

Policy HS-7.4 Residential Site Design Noise Consideration. Protect residential areas from

noise and vibration by requiring appropriate site and building design, sound walls, and landscaping and by the use of noise attenuating

construction techniques and materials.

Policy HS-7.5 Noise Restrictions in Commercial and Industrial Developments. Require

new commercial and industrial developments adjacent to residential uses to reduce potential noise impacts to comply with City noise standards.

Hazards and Safety Element Implementation Programs

Program O Establish Acoustical Study Requirement Areas. Prepare acoustical study

requirements based on the City noise contour map that will determine

when acoustic studies shall be required for sensitive land uses.

Program P Noise Level Standards. Amend Municipal Code Chapter 9.15 to establish

clear, measurable, and acceptable exterior noise level standards for all new developments and additions, including capital improvement projects. The amended Chapter shall include procedures to measure and monitor noise,

and enforcement procedures.

Program R Noise in Residential Areas. Amend the City noise ordinance to prohibit

activities such as garbage and recycling pickup, parking lot vacuuming in

residential areas, and the use of all landscape equipment.

Implementation of these policies would ensure that noise from new developments is analyzed and mitigated to acceptable levels prior to project approval. Noise impacts from operational use of residential-scale HVAC units, industrial equipment, and other stationary noise sources would be reduced by proposed 2040 General Plan policies. Therefore, the 2040 General Plan stationary operational noise impact would be less than significant.

MOBILE OPERATIONAL NOISE

Implementation of the 2040 General Plan would allow additional buildout, which would generate new vehicle trips that could incrementally increase the exposure of land uses along roadways to operation roadway vehicle noise. Figure 3.10-3 shows the 60, 65, and 70 dBA CNEL noise contours from roadways and highways for 2040 roadway vehicle scenarios. The complete distances to the 70, 65, and 60 dBA CNEL noise contours for roadway segments are included in Appendix D. Table 3.10-7 shows the estimated roadway vehicle noise level increases on study roadway segments over existing conditions at 50 feet from the centerline of the nearest travel lane.

As shown in Table 3.10-7, significant roadway vehicle noise increases are estimated along Taylor Boulevard west of Contra Costa Boulevard, Contra Costa Boulevard north of Beth Drive, Taylor Boulevard east of Alhambra Avenue, Taylor Boulevard west of Alhambra Avenue, Gregory Lane west of Cleaveland Road, and Contra Costa Boulevard north of Monument Boulevard. Along all other roadway study segments, roadway vehicle noise increases would be less than significant.

Figure 3.10-3 2040 Roadway Vehicle Noise Contours

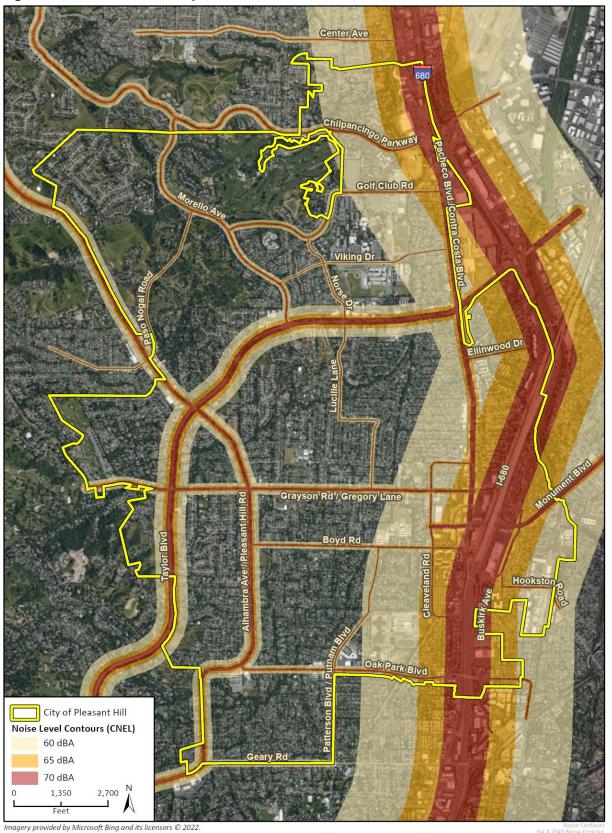


Table 3.10-7 Roadway Vehicle Noise Increase Along Roadway Segments

Roadway Segment	Existing ADT	2040 Buildout ADT	Existing Roadway Vehicle Noise Level at 50 feet (dBA CNEL)	2040 Roadway Vehicle Noise Level at 50 feet (dBA CNEL)	Roadway Vehicle Noise Increase (dBA CNEL)	Significant? Y/N
Pacheco Boulevard – North of 1st Avenue	17,000	23,600	66.8	68.2	1.4	N
Center Avenue – West of Pacheco Boulevard	8,000	82,00	63.4	63.5	0.1	N
Chilpaningo Parkway – West of Pacheco Boulevard	17,800	23,000	65.9	67.0	1.1	N
Contra Costa Boulevard – South of Concord Avenue	30,000	39,700	67.8	69.0	1.2	N
Golf Club Road – West of Pacheco Boulevard	13,100	15,700	64.2	65.0	0.8	N
Morello Avenue – North of Paso Nogal Road	8,600	11,500	63.8	65.1	1.3	N
Paso Nogal Road – East of Morello Avenue	3,900	8,600	56.9	60.3	3.4	N
Paso Nogal Road – East of Alhambra Avenue	5,000	5,900	56.3	57.0	0.7	N
Viking Drive – West of Contra Costa Boulevard	7,200	9,100	58.4	59.4	1.0	N
Morello Avenue – South of Viking Drive	8,800	14,800	61.1	63.4	2.3	N
Norse Drive – North of Taylor Boulevard	6,500	9,600	59.1	60.8	1.7	N
Taylor Boulevard – West of Contra Costa Boulevard	23,200	34,400	70.4	72.1	1.7	Y
Contra Costa Boulevard – North of Beth Drive	21,600	37,100	68.1	70.5	2.3	Y
Ellinwood Drive – East of Contra Costa Boulevard	8,200	15,900	60.1	63.0	2.9	N
Lucille Lane – North of Maureen Lane	3,100	9,400	55.9	60.7	4.8	N
Taylor Boulevard – East of Alhambra Avenue	19,800	29,800	69.4	71.0	1.6	Y
Pleasant Hill Road – North of Taylor Boulevard	27,200	32,500	69.8	70.6	0.8	N
Taylor Boulevard – West of Alhambra Avenue	19,000	27,400	72.3	73.9	1.6	Υ
Pleasant Hill Road – North of Grayson Road	15,900	22,300	66.7	68.1	1.5	N
Taylor Boulevard – South of Grayson Road	21,600	29,400	69.9	71.2	1.3	N
Gregory Lane – East of Pleasant Hill Road	13,300	18,500	64.3	65.7	1.4	N
Gregory Lane – West of Cleaveland Road	16,700	28,400	65.6	67.9	2.3	Y
Cleaveland Road – South of Gregory Lane	9,300	14,000	61.9	63.6	1.8	N
Contra Costa Blvd – North of Monument Boulevard	30,600	53,500	70.5	72.9	2.4	Y

City of Pleasant Hill Pleasant Hill 2040 General Plan

Bankun Cannak	Foliable - A DT	2040 Puildout + PT	Existing Roadway Vehicle Noise Level at 50 feet	2040 Roadway Vehicle Noise Level at 50 feet	Roadway Vehicle Noise Increase	Significant?
Roadway Segment	Existing ADT	2040 Buildout ADT	(dBA CNEL)	(dBA CNEL)	(dBA CNEL)	Y/N
Boyd Road – West of Cleaveland Road	16,700	21,700	63.2	64.3	1.1	N
Monument Boulevard – East of Buskirk Avenue	45,300	49,000	71.0	71.4	0.3	N
Buskirk Avenue – South of Monument Boulevard	25,800	30,800	66.4	67.1	0.8	N
Hookston Road – East of Buskirk Avenue	14,100	14,900	63.9	64.1	0.2	N
Buskirk Avenue – South of Mayhew Way	8,900	12,300	61.6	63.0	1.4	N
Oak Park Boulevard – West of Hook Avenue	14,400	19,600	64.0	65.3	1.3	N
Patterson Boulevard – North of Oak Park Boulevard	5,500	8,200	59.6	61.4	1.7	N
Pleasant Hill Road – North of Oak Park Boulevard	8,200	13,400	64.2	66.3	2.1	N
Oak Park Blvd – East of Pleasant Hill Road	10,500	15,200	63.9	65.5	1.6	N
Geary Road – East of Pleasant Hill Road	12,600	13,900	64.9	64.9	0.0	N
Taylor Boulevard – South of Withers Avenue	22,500	30,100	73.0	74.3	1.3	N
ADT = average daily trips						

Bold = significant increase

Source: Fehr & Peers 2022

The following proposed 2040 General Plan policies and program would reduce roadway vehicle noise:

Policy LU-6.55 Freeway Buffering. Encourage additional Ellinwood Way buffering

techniques to mitigate potential noise impacts from Interstate 680 on

future mixed-use development.

Policy HS-7.3 Transportation Agency Cooperation. Proactively cooperate with

> transportation agencies, including Caltrans and CCTA, to reduce noise from existing and future transportation facilities, including the development of noise reduction strategies related to the design and location of all facilities.

Hazards and Safety Element Implementation Programs

Program Q Dialogue with Caltrans. Encourage Caltrans to resurface all designated concrete roads within the City to reduce vehicle noise.

In addition, the following proposed 2040 General Plan goals, policies, and implementation programs would encourage active transportation modes, such as walking and bicycling, as well as the use of public transit, thereby reducing vehicle trips and roadway vehicle noise in Pleasant Hill.

- Goal LU-3 To provide a variety of housing types that offer choices for Pleasant Hill residents and create complete, livable neighborhoods.
 - Policy LU-3.2 Connectivity. Encourage new residential and mixed-use development to incorporate design features that promote walking within neighborhoods and citywide.
- Goal LU-6 Create distinct and identifiable places for future development within Pleasant Hill that enhance community character, prosperity, and civic pride.
 - Policy LU-6.4 **Enhanced Connectivity.** Support the expansion of alternative transportation options including enhancements to the multi-use trail, expanded bike lanes along Golf Club Road, and additional connections between new and existing development.
 - Policy LU-6.16 Walkable Environment. Enhance the pedestrian connections between Downtown, Crescent Drive, City Hall, and adjacent commercial centers along Contra Costa Boulevard.
 - Policy LU-6.25 **Transit-Oriented Development.** Encourage the design and development of transit-oriented developments along Contra Costa Boulevard to support future transportation system enhancements.
 - Policy LU-6.27 Pedestrian Oriented Development. Support the transformation of existing auto-oriented and strip commercial uses into attractive pedestrianoriented developments that enhance the visual character and interest of the boulevard.
 - Policy LU-6.34 **Transform Gregory Lane.** Support the transformation of Gregory Lane into an attractive streetscape that includes neighborhood-serving mixed-use with active frontages facing the street, wider sidewalks, expanded bicycle lanes, and consistent landscaping.

Policy LU-6.48 **Pedestrian Connectivity.** Require Monument Boulevard pedestrian

upgrades including signalized crossings, bulb outs, and expanded

sidewalks.

Goal LU-7 Improve the health and well-being of all Pleasant Hill residents.

Policy LU-7.2 Alternative Transportation Improvements. Support new development and

infrastructure improvements in existing neighborhoods that enable and encourage people to drive less and walk, bike, or take public transit more.

Policy LU-7.3 Remove Physical Barriers. Remove or plan for ways to address physical

barriers that bisect neighborhoods and discourage walking or biking.

Land Use Element Implementation Programs

Program L Pedestrian and Bicycle Barrier Removal. Prepare an analysis of the

physical barriers to walking and bicycling throughout the city. Identify options for and prepare a program for barrier removal. The analysis should include improvement prioritization, cost estimates, funding sources, and a

timeline for improvements.

Goal TC-1 Establish and maintain a safe and efficient circulation system that emphasizes the

use of existing arterial and collector roadways, paths, and bike lanes.

Policy TC-1.2 Multimodal Travel Options. Develop a connected network of vehicle,

bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.

Goal TC-2 Improve traffic circulation along the city roadway network.

Policy TC-2.5 Transportation Demand Management (TDM). Require robust

> transportation demand management with all new private development that requires establishment of incentives and programs to reduce traffic congestion including annual reporting to ensure transportation demand management goals for a project are being met and to correct

transportation demand management practices.

Policy TC-2.6 Safe Routes to School (SR2S). Establish a Safe Routes to School program in

> collaboration with the school districts and private schools that identifies and promotes suggested routes to school and incentivizes students and parents to use alternative transportation modes for school commutes.

Goal TC-4 Reduce congestion and vehicle trips through land use planning.

Policy TC-4.4 Infill Development. Support infill and development in existing urban areas

and around key transit facilities.

Policy TC-4.5 Correlation Between Land Use and Transportation. Support land use

> patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating

parking, and other best practice urban design measures.

- Goal TC-5 Support a vibrant, walkable environment that encourages alternative (non-driving) modes of transportation.
 - **Policy TC-5.1**Evaluate Multimodal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).
 - **Policy TC-5.3 Mobility Technology Support.** Identify and implement technology that supports walking, biking, commuting, and other alternative transportation modes within the City including infrastructure that supports micro mobility use within the City.
- Goal TC-6 Reduce reliance on the automobile by promoting alternative modes of transportation.
 - Policy TC-6.1 Encourage Non-Driving Forms of Personal Mobility. Encourage bicycling, walking, and other forms of personal mobility, like e-scooters, e-bikes, and neighborhood electric vehicles, as energy conserving, non-polluting modes of travel.
 - Policy TC-6.2 Private Development of Transportation Facilities. Encourage private entities to develop and maintain publicly accessible transportation facilities, including transit, pedestrian, and bicycle facilities.
 - **Policy TC-6.3**Non-Vehicular Transportation Requirement. Require new developments that would result in significant increases in air pollution, VMT or noise to incorporate non-vehicular facilities or programs that would reduce the overall project impacts on these resources including e-Bike charging stations and free use e-Bike pod stations for residential and commercial development.
 - Policy TC-6.4 Amenities for Non-Driving Modes of Transportation. Require new development with more than 10 housing units or over 5,000 square feet of non-residential uses to include amenities that encourage active modes of transportation that reduce pollution or VMT as a benefit to the community (e.g., bicycle lockers/racks, showers, dedicated vanpool or carpool parking areas, dedicated shuttle services, e-bike charging stations innovative bus shelter designs).
- Goal TC-12 Strive to eliminate all fatal and serious injury bicycle and pedestrian related crashes.
 - **Policy TC-12.6 Bike Route Connectivity.** Develop and sign a network of bicycle routes that provide connectivity between homes, job centers, schools and other frequently visited destinations.
 - **Policy TC-12.7 Emphasis on Walking and Biking.** Encourage more people to walk and bicycle for a variety of purposes.

- **Policy TC-12.8** Bicycle Parking. Support the expansion of the bicycle parking network in Pleasant Hill.
- **Policy TC-12.11** Commute Information. Promote 511 Contra Costa alternative commute mode materials to encourage reduced reliance on vehicular use.

Goal TC-13 Reduce congestion and vehicle trips through non-automobile transportation.

- **Policy TC-13.1 Bus and Rail Services.** Coordinate with local transit providers (i.e., bus, paratransit, and rail service) to provide expanded schedules and services that meet the needs of Pleasant Hill residents.
- Policy TC-13.2 Innovative Transportation Technologies. Work with transit providers, employers, schools, and developers to encourage innovative technologies that promote more effective and expanded use of transit and facilitate other innovations to serve first and last mile travel, such as mobility hubs and micro-mobility (e-scooters, e-bikes).
- Goal TC-15 Reduce vehicle trips and vehicle trip lengths and manage vehicle congestion through a comprehensive program of transportation resources and services.
 - **Policy TC-15.1 TDM Alternatives.** Meet the increased transportation needs of the community with TDM alternatives.
 - **Policy TC-15.2** Require TDM Programs. Require new development to implement appropriate TDM programs to encourage walking, biking, carpooling, and transit use, and to reduce vehicle trips.
 - **Policy TC-15.3 TDM for New Development.** All new development with more than 10 housing units or over 5,000 square feet of non-residential uses shall be required to include a detailed and measurable TDM program.
 - **Policy TC-15.6 TDM Measures for Non-Residential Land Uses.** Encourage measures to reduce vehicular trips and vehicle-miles travelled (VMT). Examples are the provision of on-site childcare and after-school care facilities, and on-site modular mini-conference rooms for virtual meetings.

Transportation & Circulation Element Implementation Programs

- **Program G**Non-automobile Commute Incentives. Prepare an analysis of potential incentives to encourage City employees to commute to work using alternative means, including BART and bus passes, ridesharing, van pooling, and secure bicycle storage facilities.
- Program J Citywide Bicycle Plan and Pedestrian Master Plan. Update every seven (7) years the Citywide Bicycle Plan and Pedestrian Master Plan to specify bicycle and pedestrian facility networks, and to identify and prioritize bicycle and pedestrian facility needs in the city.
- **Program P** Incentivized Reduced Vehicle Trips. Create incentives for existing employers to reduce their vehicle trips.

Program Q Promote Carpools and Vanpools. Promote the use of carpools and vanpools by supporting and **advertising** services and programs implemented by 511ContraCosta.org, which operates transportation

demand management (TDM) programs and services in the city.

Program R Transportation Demand Management System. Develop a transportation

demand management program checklist and seek to fund TDM fee.

Program U Bike Route Connectivity. Develop and sign a network or bicycle routes that

provide connectivity between homes, job centers, schools, and other

frequently visited destinations.

Implementation of these policies would reduce operational roadway vehicle trips and associated operational roadway vehicle noise to the extent feasible. However, implementation of these goals, policies, and implementation programs highlighted above would not guarantee that roadway vehicle noise would be below the thresholds of significance. As such, roadway vehicle noise impacts would be potentially significant. Since there are no feasible measures that would reduce roadway vehicle noise to less than significant in all cases, this impact is considered significant and unavoidable.

Mitigation Measures

MITIGATION MEASURE NOI-1 ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO UPDATE THE ZONING ORDINANCE TO IMPLEMENT CONSTRUCTION NOISE REDUCTION MEASURES

To minimize noise during construction, the City shall adopt the following 2040 General Plan Hazards and Safety Element policy to update the Zoning Ordinance to include the following:

- New Policy: Construction contractors shall implement the following measures for construction activities conducted within the City. Construction plans submitted to the City shall include construction noise analysis and identify these measures on demolition, grading, and construction plans submitted to the City. The City of Pleasant Hill Building Division shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading and/or building permits.
 - Mufflers. During excavation and grading construction phases, all construction equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards.
 - Stationary Equipment. All stationary construction equipment shall be placed so that emitted noise is directed away from the nearest sensitive receivers.
 - Equipment Staging Areas. Equipment staging shall be located in areas that will create the greatest distance feasible between construction-related noise sources and noise-sensitive receivers.
 - Smart Back-up Alarms. Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction in compliance with applicable safety laws and regulations.

- Electrically-Powered Tools and Facilities. Electrical power shall be used to run air compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities, where feasible.
- Noise Disturbance Coordinator. The project applicant shall designate a "noise disturbance coordinator" responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint and shall require that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator and the City shall be posted at the construction site.
- Temporary Noise Barriers. Erect temporary noise barriers, where feasible, when construction noise is predicted to exceed the acceptable standards (e.g., 80 dBA Leq at residential receivers, schools or other sensitive receptors during the daytime) and when the anticipated construction duration is greater than is typical (e.g., two years or greater). Temporary noise barriers shall be constructed with solid materials (e.g., wood) with a density of at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. If a sound blanket is used, barriers shall be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated sound transmission class (STC) 32 or higher.

Level of Significance

Significant and unavoidable

Airport Activity Noise

Significance Criterion b:	For location within the vicinity of a private airstrip or an airport land use
	plan or, where such a plan has not been adopted, within two miles of a
	public airport or public use airport, would the proposed plans expose
	people residing or working in the project area to excessive noise levels?

IMPACT NOI-2 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN NEAR BUCHANAN FIELD AIRPORT MAY EXPERIENCE NOISE LEVELS THAT EXCEED NOISE LAND USE COMPATIBILITY STANDARDS BUT WOULD NOT RESULT IN A DIRECT INCREASE IN AIRPORT AND AIRSTRIP ACTIVITY. PROPOSED GENERAL PLAN POLICIES REQUIRE ANALYSIS OF PROJECTS THAT MAY EXCEED ACCEPTABLE NOISE EXPOSURE STANDARDS. THE CONTINUED REGULATION OF AIRPORT NOISE CONSISTENT WITH STATE AND FEDERAL REGULATIONS AND IMPLEMENTATION OF PROPOSED GENERAL PLAN POLICIES AND THE CONTRA COSTA AIRPORT LAND USE COMPATIBILITY PLAN WOULD ALSO MINIMIZE DISTURBANCE TO PEOPLE RESIDING OR WORKING IN PROXIMITY OF THE BUCHANAN FIELD AIRPORT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Potential noise impacts related to location proximate to a private airstrip or public use airport are limited to operational impacts. No respective construction impacts related to effects of airport activity noise would occur.

Operation

The Buchanan Field Airport is a public airport that has a recently renovated runway, aviation services and facilities, emergency response services, access to Bay Area transportation and business

centers, and related transportation amenities. Development facilitated by the 2040 General Plan is not expected to directly increase airport activities and airport noise. Existing requirements for airports would reduce the noise impacts of airport activity on residents and workers. Title 21 of the California Code of Regulations establishes noise standards for airports and the responsibilities of the regional Airport Land Use Commissions, which prepare land use compatibility plans with thorough evaluations of airport noise, as described above in Section 3.10.3, *Regulatory Setting*. Additionally, the Federal Aviation Administrative Regulation Part 150 Airport Noise Compatibility Program is designed to reduce the effect of airport noise on the surrounding communities as airports expand.

Further, individual projects as a result of development facilitated by the 2040 General Plan would be subject to all development standards if the project is located within Safety Zone 4 of the Buchanan Field Airport, and other policies contained within the Contra Costa County Airport Land Use Compatibility Plan intended to reduce land use conflicts with airport operations. Such measures are required for the Buchanan Field Airport, which are outlined in Section 3.10.3, *Regulatory Setting*.

As required by General Plan 2040 Policy HS-7.1, new development would be required to be designed and constructed to meet acceptable noise level standards adopted by the City. Additionally, as required by Policy HS-7.2, noise impacts from new development would be evaluated based on the potential for significant increases in noise levels and compliance with acceptability standards. Acoustical design features would be required, if necessary, to comply with City noise standards. Program O of the Hazards and Safety Element also requires the establishment of acoustical study requirement areas which would determine when acoustical studies shall be required for sensitive land uses.

Lastly, the following proposed 2040 General Plan Health and Safety Element policies would reduce noise from the Buchanan Field Airport.

Goal HS-6 Ensure that airport operations do not adversely affect quality of life and safety for residents.

Policy HS-6.1 Airport Land Use Compatibility Plan Adherence. Ensure consistency with

the County Airport Land Use Compatibility Plan development restrictions.

Policy HS-6.2 Airport Coordination. Coordinate with Buchanan Field Airport on land use considerations where compatibility issues may occur on the border of the

airfield.

With the aforementioned requirements in place and implementation of proposed 2040 General Plan policies, airport activity would not expose residents and workers to excessive noise. Therefore, the 2040 General Plan operational impact related to consistency with noise land use compatibility standards and effects of airport activity noise would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Less than significant without mitigation

Groundborne Vibration and Noise Generation

Significance Criterion c: Would the proposed plan result in generation of excessive groundborne vibration or groundborne noise levels?

IMPACT NOI-3 CONSTRUCTION OF INDIVIDUAL PROJECTS FACILITATED BY THE 2040 GENERAL PLAN WOULD TEMPORARILY GENERATE GROUNDBORNE VIBRATION AND NOISE, POTENTIALLY AFFECTING NEARBY LAND USES.

OPERATION OF DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD NOT RESULT IN SUBSTANTIAL GROUNDBORNE VIBRATION AND NOISE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

Construction

Construction of individual projects facilitated by the proposed 2040 General Plan could intermittently generate groundborne vibration to nearby properties. Table 3.10-8 lists groundborne vibration levels from various types of construction equipment at various distances.

Table 3.10-8 Vibration Source Levels for Construction Equipment

			Approximate Vibr	ation Level (in/sec PF	PV)
Equipment		25 feet from Source	50 feet from Source	100 feet from Source	200 feet from Source
Caisson Drilling		0.089	0.031	0.011	0.004
Jackhammer		0.035	0.012	0.004	0.002
Large Bulldozer		0.089	0.031	0.011	0.004
Loaded Truck		0.076	0.027	0.010	0.003
Pile Driver (impact)	Upper range	1.519	0.537	0.190	0.067
	Typical	0.644	0.228	0.081	0.028
Pile Driver (sonic)	Upper range	0.734	0.260	0.092	0.032
	Typical	0.170	0.060	0.021	0.008
Small Bulldozer		0.003	0.001	<0.001	<0.001
Vibratory Roller		0.21	0.074	0.026	0.009

Source: Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: 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 October 2022).

As shown in Table 3.10-8, buildings and structures could experience the strongest vibration during the use of pile-drivers and vibratory rollers. Vibration levels from pile-drivers could approach 1.519 in/sec PPV at a distance of 25 feet from the source and 0.190 in/sec at 100 feet, and vibration levels from vibratory rollers could approach 0.21 in/sec PPV at a distance of 25 feet and 0.026 at 100 feet. The threshold for historic structures is 0.12 in/sec PPV; the threshold is higher for residential buildings at 0.2 in/sec PPV.

Vibration levels from typical equipment such as bulldozers and jackhammers would not exceed FTA thresholds for historic structures and residential buildings at a distance of 25 feet or greater. However, vibration levels from pile driving equipment and vibratory rollers may exceed FTA thresholds. Implementation of Policy HS-7.4 contained in the 2040 General Plan would reduce construction vibration in residential areas.

Policy HS-7.4

Residential Site Design Noise Consideration. Protect residential areas from noise and vibration by requiring appropriate site and building design, sound walls, and landscaping and by the use of noise attenuating construction techniques and materials.

Implementation of Policy HS-7.4 would ensure that residential areas are protected from noise and vibration. However, since at this stage of planning, project-level details are not available for individual development projects that would be carried out under the 2040 General Plan, it is not possible to determine which projects may use pile driving or vibratory rollers and their exact vibration levels, locations, or time periods for construction of such projects. Therefore, construction vibration levels may exceed FTA vibration levels for preventing architectural building damage, and impacts would be potentially significant. However, implementation of Mitigation Measure NOI-2 would reduce 2040 General Plan construction groundborne vibration and noise impacts in Pleasant Hill to a level of less than significant.

Operation

Residential, commercial, industrial, and retail land uses facilitated by the 2040 General Plan would not involve substantial vibration sources associated with operation such as railroad and subway. Therefore, 2040 General Plan operational groundborne vibration and noise impacts would be less than significant.

Mitigation Measures

MITIGATION MEASURE NOI-2 ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO UPDATE THE ZONING ORDINANCE TO IMPLEMENT CONSTRUCTION VIBRATION CONTROL MEASURES

To reduce potential construction vibration impacts, the City shall adopt the following 2040 General Plan Hazards and Safety Element policy to update the Zoning Ordinance to include the following:

New Policy: Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures such as historical resources, 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); a vibratory roller within 40 feet of fragile historical resources or 25 feet of any other structure; or a dozer or other large earthmoving equipment within 20 feet for a fragile historical structure or 15 feet of any other structure, the project applicant shall prepare a groundborne noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these construction activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed this threshold, alternative uses such as drilling piles as opposed to pile driving, static rollers as opposed to vibratory rollers, and lower horsepower earthmoving equipment shall be used. If necessary, construction vibration monitoring shall be conducted to ensure FTA vibration thresholds are not exceeded.

Level of Significance

Less than significant

3.10.5 Cumulative Impacts

The geographic scope of the cumulative noise analysis is the City of Pleasant Hill and adjacent city and airport areas. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (see Chapter 3.0, *Environmental Impact Analysis*) located in Pleasant Hill, Concord, Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, unincorporated Contra Costa County, and at the Buchanan Field Airport in addition to the proposed plan.

Construction Noise

Construction noise generated by the 2040 General Plan, in combination with construction activities for other cumulative projects that may be constructed simultaneously could, without mitigation, substantially increase noise levels in the vicinity of future projects. Mitigation measures have been identified to help reduce noise from construction equipment from 2040 General Plan projects. Therefore, unless construction of cumulative projects, including those proposed under development facilitated by the 2040 General Plan, occur in close proximity to each other and simultaneously, noise from individual construction projects have a small chance of combining to create significant cumulative impacts. Although this scenario is unlikely, and mitigation measures would be implemented to the extent feasible, the potential remains for a cumulatively considerable increase in construction noise from 2040 General Plan projects. Therefore, the cumulative impact related to construction noise would be significant and unavoidable.

Operational Stationary Noise

Development facilitated by the 2040 General Plan would introduce new stationary noise sources to the ambient noise environment in the vicinity of the plan area, including new mechanical ventilation equipment. These sources may combine with other nearby cumulative projects to result in higher noise levels. However, operational noise from these sources is localized and rapidly attenuates within an urbanized setting due to the effects of intervening structures and topography that block the line of sight and due to other noise sources closer to receptors that obscure project-related noise. Implementation of city municipal code noise standards would ensure that noise from new stationary sources as part of the cumulative projects would be within acceptable levels. Therefore, the cumulative impact related to operational stationary noise would be less than significant.

Operational Mobile Noise

As discussed in Impact NOI-2, roadway vehicle noise increases from development facilitated by the 2040 General Plan would contribute to noise level increases that exceed impact criteria and would be cumulatively considerable. Therefore, in combination with mobile noise for other cumulative projects, the cumulative impact related to operational mobile (roadway vehicle) noise would be significant and unavoidable.

Groundborne Vibration and Noise

Although there could be other cumulative projects simultaneously under construction near a development project facilitated by the 2040 General Plan, the potential for construction groundborne vibration and noise impacts is within relatively close distances (e.g., within approximately 25 feet for a vibratory roller). Since no two construction cumulative projects would

both be within 25 feet of a given sensitive structure, cumulative groundborne vibration and noise impacts would be less than significant.

Overall Level of Cumulative Significance

Significant and unavoidable

Pleasant Hill 2040 General Plan	
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City of Pleasant Hill

3.11 Public Services and Recreation

3.11.1 Introduction

This section describes the existing conditions related to public services (fire, police, schools, library) and recreation (parks and open space) serving Pleasant Hill, as well as the relevant regulatory framework. This section also evaluates potential impacts to public services and recreation that could result from implementation of the 2040 General Plan. Information in this section is based on information obtained from the Pleasant Hill 2003 General Plan, Pleasant Hill Municipal Code, as well as from the Contra Costa County Fire Protection District, Pleasant Hill Police Department, Mt. Diablo Unified School District, Contra Costa County Library, and Pleasant Hill Recreation and Park District.

3.11.2 Environmental Setting

Fire Protection

Contra Costa County Fire Protection District Service Area

The Contra Costa County Fire Protection District (CCCFPD) provides fire protection services to all of Contra Costa County in its approximately 304 square-mile service area. CCCFPD operates 25 fire stations with 27 fire companies and approximately 288 firefighters, and provides a variety of services including fire suppression, fire prevention, emergency medical, rescue, ambulance transport, and public education programs. According to the 2018 CCCFPD annual report, CCCFPD maintains a fleet of approximately 40 Type 1 fire engines, 10 aerial ladder trucks, 22 Type 3 wildland firefighting engines, 53 ambulances, two heavy rescue vehicles, and several additional vehicles. The average response time to calls within the central region of the County, where the City of Pleasant Hill is located, is approximately 5 minutes and 35 seconds. ^{1, 2}

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan Area) is served by CCCFPD Fire Station No. 2, located at 2012 Geary Road in Pleasant Hill, and CCCFPD Fire Station No. 5, located at 205 Boyd Road in Pleasant Hill.³ Figure 3.11-1 shows these existing fire stations within Pleasant Hill.

Police Protection

City of Pleasant Hill Police Department Service Area (General Plan Area)

The City of Pleasant Hill Police Department (PHPD) provides police protection services to Pleasant Hill (i.e., the General Plan Area). PHPD operates one station, located at 330 Civic Drive in Pleasant Hill. PHPD has approximately 57 full-time employees, and as of 2019 PHPD maintained 1.3 full-time equivalent sworn personnel per 1,000 residents, or approximately 46 sworn personnel.⁴ Figure 3.11-1 shows this existing police station within Pleasant Hill.

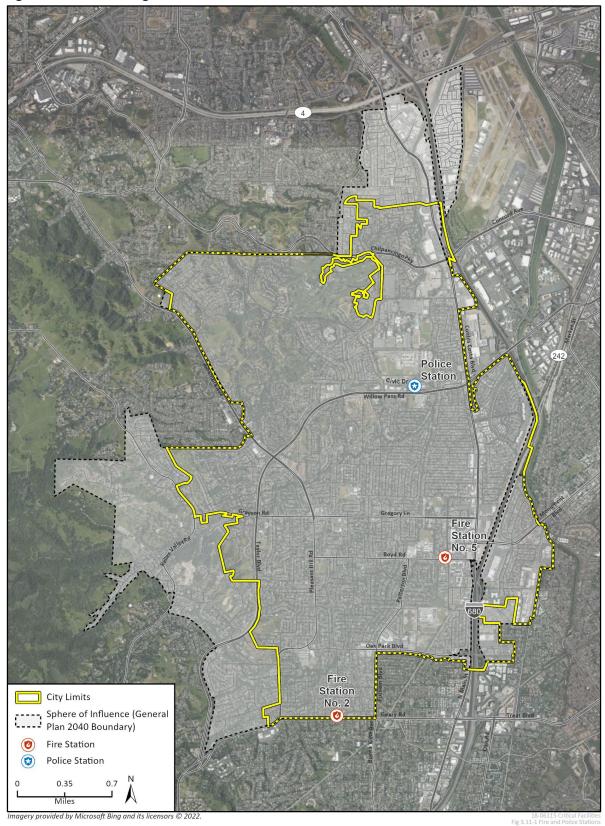
¹ Pleasant Hill, City of. 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook. https://pleasanthill2040.com/documents.html (accessed September 2022).

² CCCFPD. 2018. 2018 Annual Report. https://cccfpd.org/2018-annual-report/# (accessed September 2022).

³ CCCFPD. 2022. Station Addresses. https://cccfpd.org/station-address/ (accessed September 2022).

⁴ Pleasant Hill, City of. 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook. https://pleasanthill2040.com/documents.html (accessed September 2022).

Figure 3.11-1 Existing Pleasant Hill Fire and Police Station Locations



Public Schools

Mount Diablo Unified School District Service Area

Mount Diablo Unified School District (MDUSD) provides public education services to the City of Pleasant Hill. MDUSD operates 31 elementary schools, nine middle schools, five high schools, and two adult education centers, which serve students across the Cities of Pleasant Hill, Clayton, and Concord; portions of the Cities of Martinez, Pittsburg, and Walnut Creek, and several unincorporated Contra Costa County communities.⁵

Pleasant Hill (General Plan Area)

Pleasant Hill (i.e., the General Plan area) is served by seven elementary schools, two middle schools, and two high schools, with all but two of these elementary schools located within Pleasant Hill (see Figure 3.11-3). These schools and their existing enrollment are shown below in Table 3.11-1.

Table 3.11-1 Public Schools Attendance Boundaries within General Plan Area

School Name	Grades	2021-2022 Enrollment	
Mount Diablo Unified School District			
Cambridge Elementary	K – 5	499	
Fair Oaks Elementary	K – 5	306	
Gregory Gardens Elementary	K – 5	352	
Hidden Valley Elementary	K – 5	767	
Pleasant Hill Elementary	K – 5	570	
Strandwood Elementary	K – 5	551	
Valhalla Elementary	K – 5	579	
Pleasant Hill Middle	6 – 8	706	
Valley View Middle	6 – 8	732	
College Park High	9 – 12	1,973	
Ygnacio Valley High	9 – 12	1,230	

Source: California Department of Education (DOE). 2022. 2021 – 2022. Enrollment by Grade.

https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=0761754&agglevel=district&year=2021-22 (accessed September 2022).

The MDUSD current enrollment is approximately 29,800 students.⁷ Enrollment has been declining in recent years, decreasing by 0.6 percent to 1.5 percent each year between 2015 and 2020. Between 2020 and 2021, enrollment at MDUSD schools decreased by 1,129 students.⁸

⁵ Pleasant Hill, City of. 2019. Pleasant Hill 2040 General Plan Existing Conditions and Trends Workbook.

https://pleasanthill2040.com/documents.html (accessed September 2022).

⁶ Mt. Diablo Unified School District (MDUSD). 2022. SchoolSite Locator.

https://portal.schoolsitelocator.com/apps/ssl/?districtcode=10020 (accessed September 2022).

 $^{^{\}rm 7}$ California Department of Education. 2022. 2021 – 2022. Enrollment by Grade.

https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=0761754&agglevel=district&year=2021-22 (accessed September 2022).

⁸ California Department of Education. 2021. Enrollment Multi-Year Summary by Grade.

https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdYears.aspx?cds=0761754&agglevel=district&year=2021-22 (accessed November 2022).

Figure 3.11-2 Existing School Locations Serving Pleasant Hill

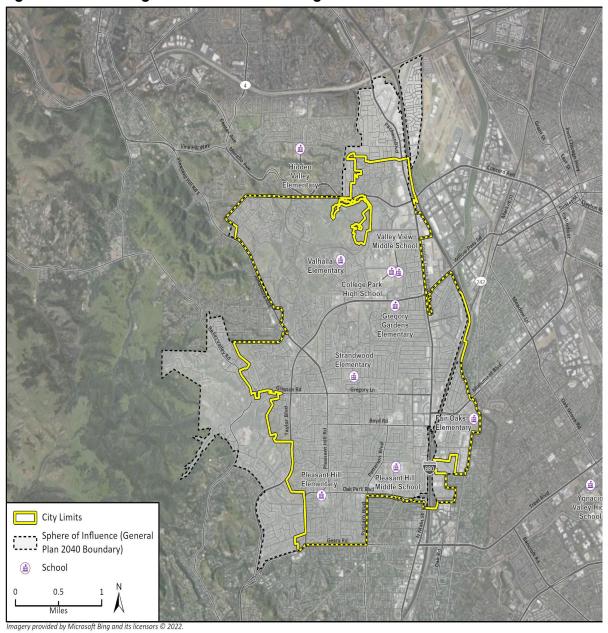


Table 3.11-2 outlines the student generation rates utilized by MDUSD to calculate student enrollment associated with general housing development.

Table 3.11-2 MDUSD Student Generation Rates

Generation Rate per Housing Unit		per Housing Unit
Grade	Single-Family units	Multi-Family units
K – 6	0.172	0.253
7 – 8	0.046	0.064
9 – 12	0.077	0.117
Total	0.295	0.434

Source: Mt. Diablo Unified School District Ten Year Student Population Projections by Residence. https://mdusd-ca.schoolloop.com/file/1516177890045/1575703006235/5723210495881803816.pdf (accessed November 2022).

Libraries

Contra Costa County Library System Service Area

The Contra Costa County Library system operates 28 library facilities across Contra Costa County which serve the Cities of Antioch, Brentwood, Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez, Oakley, Orinda, Pinole, Pleasant Hill, San Pablo, San Ramon, and Walnut Creek; the Towns of Danville and Moraga; and the unincorporated communities of Bay Point, Crockett, El Sobrante, Kensington, Rodeo.⁹

Pleasant Hill (General Plan Area)

The Pleasant Hill Library, located at 2 Monticello Avenue in Pleasant Hill, is operated by the Contra Costa County Library system and provides thousands of materials in multiple languages, and offers several programs to library patrons. Programs include weekly English language conversation meetings, weekly story readings for children of varying ages, and after-school art programs.

Parks and Recreational Facilities

City of Pleasant Hill Recreation and Park District Service Area (General Plan Area)

There are approximately 147 acres of developed parkland in Pleasant Hill. The City provides four types of parkland, in addition to non-joint use school recreation facilities for public recreation. Parks are classified by the Pleasant Hill Recreation and Park District (PHRPD) as follows:

- Developed parks, which consist of City parks throughout Pleasant Hill
- Open space, which consists of the Las Juntas Open Space
- Undeveloped open space, which consists of several undeveloped acres throughout the city
- Joint-use school facilities, which consist of school recreation facilities

⁹ Contra Costa County Library. 2022. Contra Costa County Library Locations. https://ccclib.bibliocommons.com/locations/list (accessed December 2022).

PHRPD currently maintains 13 parks, one area of open space, and seven areas of undeveloped open space. PHRPD also lists the recreation facilities located at several schools within Pleasant Hill as publicly available parks and recreational facilities. ¹⁰ Currently, there are approximately 4.3 acres of parkland per 1,000 residents in Pleasant Hill (147 acres of parkland divided by 34 thousand residents), ¹¹ which exceeds the City goal to provide three acres of developed parkland per 1,000 residents. Additional parkland is available to Pleasant Hill residents west of the General Plan area, including Briones Regional Park. Table 3.11-3 summarizes the types and areas of parkland, and Figure 3.11-3 shows the locations of parkland throughout the General Plan area.

Table 3.11-3 Existing Pleasant Hill Parks, Open Space, and Recreational Facilities Inventory

Park or Recreational Facility	Acreage ¹
Parks	127
Sherman Acres Park	0.16
Pinewood Park	0.5
Frank Salfingere Park	1.5
Rodgers Ranch Heritage Center	1.8
Shannon Hills Park	2.1
Chilpancingo Park	2.5
Shadowood Park	2.5
Rodgers-Smith Park	4.5
Brookwood Park	6.3
Pleasant Oaks Park	11.5
Dinosaur Hill Park	13.6
Pleasant Hill Park	16.5
Paso Nogal Park	63
Open Space	7
Las Juntas Open Space	7
Undeveloped Acres	116
Ridgeview Open Space	57
Diablo Valley Estates Open Space	4
Valley High II Open Space	19.1
Valley High IV Open Space	11
Valley V Open Space	4.6
Woodside Hills I Open Space	7.2
Woodside Hills III Open Space	13.3

¹⁰ Pleasant Hill Recreation and Park District. 2020. Parks, Facilities, and Recreation Master Plan.

https://pleasanthillrec.com/DocumentCenter/View/5770/Pleasant-Hill-MasterPlan-_FINAL_5-19-2020 (accessed September 2022).

¹¹ California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State. https://dof.ca.gov/forecasting/demographics/estimates/ (accessed September 2022).

Park or Recreational Facility	Acreage ¹
Schools/Other	13
College Park High School	3.4
Valley View Middle School Softball Field	4.8
Pleasant Hill Middle School	N/A
Winslow Center	3.1
School House Site	1.9
Total Developed Parkland	147
Total Parkland	262.86
Recreational Facilities	
Winslow Center	>1
Rodgers Ranch Heritage Center	>1
Pleasant Hill Community Center	>1
Senior Center	>1
Teen Center	>1
Aquatic Park	>1

¹ Acreage is rounded to the nearest tenth acre. Numbers may not sum precisely due to rounding.

Source: Pleasant Hill Recreation and Park District. 2022. Recreation and Park District Parks, Facilities, and Recreation Master Plan. https://pleasanthillrec.com/DocumentCenter/View/5770/Pleasant-Hill-MasterPlan-_FINAL_5-19-2020 (accessed September 2022).

Paso Nogal Park Frank Salfingere Las Juntas Pleasant Hill Park Community Center Winslow Center Hills Park **Senior Center** Rodgers Smith Park Teen Center Rodgers Ranch Heritage Center Pleasant Hill Aquatics Dinosaur Park PH Elementary Park City Limits Sphere of Influence (General Plan 2040 Boundary) **Parks** Open Space Community Facilities 0.35 Miles Imagery provided by Microsoft Bing and its licensors © 2022. 18-06115 Critical Facilitie Fig 3.11-3 Open Space and Re

Figure 3.11-3 Existing Pleasant Hill Parks and Recreational Facility Locations

3.11.3 Regulatory Framework

Federal Regulations

National Fire Protection Association Codes and Standards

The National Fire Protection Association (NFPA) publishes 300 codes and standards intended to minimize the possibility and effects of fire and other risks. Among these codes and standards are specific policies designed for fire protection. These standards range from fire protection and life safety systems, standards for portable fire extinguishers to recreational vehicle standards.

State Regulations

California Health and Safety Code (Sections 13000 et seg.)

California Health and Safety Code Sections 13100–13135 establish State fire regulations, including regulations for building standards (also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Code of Regulations, Title 24 (California Building Standards Code)

The 2022 California Building Standards Code (CBC), contained in California Code of Regulations, Title 24, became effective January 1, 2020 and was adopted by the City of Pleasant Hill December 5, 2022 (Ordinance 958). Section 701A.3.2 of the CBC requires that new buildings located in any Fire Hazard Severity Zone in State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted, comply with all sections of the Chapter.

California Code of Regulations, Title 24, Part 9 (California Fire Code)

The 2022 California Fire Code, contained in Part 9 of California Code of Regulations, Title 24, incorporates by adoption the 2018 International Fire Code of the International Code Council, with California amendments, and became effective January 1, 2020. The City of Pleasant Hill adopted the 2022 California Building Code December 5, 2022 (Ordinance 959). The California Fire Code regulates building standards set forth in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection. The California Fire Code also addresses dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; conditions hazardous to life or property in the use or occupancy of buildings or premises; and provisions to assist emergency response personnel. The California Fire Code is updated and published every 3 years by the California Building Standards Commission.

California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively for local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include police protection. Section 30056 provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an

agency is required to use Proposition 172 to supplement its local funds used on police protection, as well as other public safety services. Section 35 at subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." In City of Hayward v. Board of Trustees of California State University (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including police protection, and that it is reasonable to conclude that the city will comply with that provision to ensure that public safety services are provided.

California Senate Bill 50

California Senate Bill 50 (SB 50) (funded by Proposition 1A, approved in 1998) limits the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development, and provides instead for a standardized developer fee. SB 50 generally provides for a 50/50 State and local school facilities funding match. SB 50 also provides for three levels of statutory impact fees. The application level depends on whether State funding is available, whether the school district is eligible for State funding, and whether the school district meets certain additional criteria involving bonding capacity, year-round school, and the percentage of moveable classrooms in use.

California Government Code Section 65995(b) (Title 7, Chapter 4.9) and Education Code Section 17620

California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. Section 65995 was established under the School Facilities Act of 1986 and refined and amended by the SB 50 to provide further guidance and restrictions on fee limits and fee types. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits, and subdivisions.

No fees are charged for new or expanded facilities that are under 500 square feet. The payment of school impact fees by developers are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws. MDUSD determines fees annually in accordance with California Government Code Section 65995. Current MDUSD development impact fees are shown below in Table 3.11-4.

Table 3.11-4 Mt. Diablo Unified School District Development Impact Fees

Development Type	Development Impact Fee (per square foot)	
Residential	\$4.08	
Commercial and Industrial	\$0.66	
Hotel/Motel	\$0.524	
Self-Storage	\$0.03	

Source: Mt. Diablo Unified School District (MDUSD). 2021. Mt. Diablo Unified School District Annual Report Accounting for Developer Fees in the Capital Facilities Fund (Fund 25 For Fiscal Year 2020-21. https://mdusd-

ca.schoolloop.com/file/1516177890045/1575703006235/232043188211450375.pdf?filename=20-

21%2BAnnual%2BReport%2BAccounting%2Bfor%2BDeveloper%2BFees%2Bin%2Bthe%2BCapital%2BFacilities%2BFund%2B%2528Fund%2B25%2529.pdf (accessed September 2022).

Local Regulations

Pleasant Hill Municipal Code Section 14.05.080 (Fire Code)

Pleasant Hill Municipal Code (PHMC) Section 14.05.080 adopts the 2022 California Fire Code and incorporates local amendments proposed by the City and CCCFPD. Local amendments include but are not limited to access requirements for fire apparatus, construction and renovation requirements, and operational permit requirements.

Pleasant Hill Municipal Code Articles 27 and 28

The City imposes development impact fees through PHMC Articles XXVII and XXVIII to fully or partially offset the costs of public capital facilities and infrastructure that is needed to serve new demand created by development projects that derive from projects. All new development in the City of Pleasant Hill is required to pay applicable development impact fees. The fees are imposed based on specified development categories.

Impact fees are different from, and apply in addition to, utility connection and planning application and building permit application fees, which are used to cover the cost of the City's processing for permits and direct utility costs. The City may also impose other fees or exactions imposed pursuant to the Subdivision Map Act, or other measures required to mitigate site-specific impacts of a development project, including, but not limited to, mitigations pursuant to CEQA; regulatory and processing fees; fees required pursuant to a development agreement; funds collected pursuant to a reimbursement agreement that exceed the applicant's share of public improvement costs; or assessment district proceedings, benefit assessments, or taxes.

City of Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to public services and recreation, but they would be replaced by the proposed 2040 General Plan.

3.11.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Public Services and Recreation.

Would the 2040 General Plan:

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - 1. Fire protection?
 - 2. Police protection?
 - 3. Schools?
 - 4. Parks?
 - 5. Other public facilities?

- b) 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?
- c) 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

Fire and Police Services

Impacts on fire and police services were determined by evaluating the proposed plan's effect on existing fire and police station response times. Projected population associated with buildout of the proposed 2040 General Plan was also reviewed. In addition, fire and police (emergency) access to the plan areas was evaluated. Furthermore, impacts related to fire and police service were also based on information received in response to request letters sent to the respective service providers for input related to possible impacts.

School and Library Services

Impacts on schools were determined by evaluating the proposed plan's effect on existing school enrollment. Projected population and school enrollment data provided by the California Department of Education and MDUSD were also reviewed. Furthermore, impacts related to schools and other public facilities (i.e., libraries) were also based on information received in response to request letters sent to the respective service providers for input related to possible impacts.

EIR Scoping Comments Consideration

This section also addresses comments received in response to publication of the Notice of Preparation for this EIR, regarding the provision of parks and open space. Impacts to parks and open space are discussed under Impact PS-4.

Specific Significance Thresholds

For purposes of this analysis, the following thresholds are used to evaluate the significance of public service and recreation impacts resulting from implementation of the proposed plan:

- Result in additional population or activities requiring fire protection, police protection, school, or library services in a manner that necessitates the need for new or altered facilities, the construction of which would result in significant construction-related traffic air quality, greenhouse gas (GHG) emissions, or noise impacts. If new or altered facilities are proposed or determined to be needed, then determination of significance of construction-related transportation, air quality, GHG emissions, hazards, and noise impacts is based on the respective specific thresholds of significance listed in Section 3.12, *Transportation*; Section 3.2, *Air Quality*; Section 3.6, *Greenhouse Gas Emissions and Energy*; Section 3.7, *Hazards, Hazardous Materials, and Wildfire*; and Section 3.10, *Noise*.
- Result in additional population using recreational facilities and causing physical deterioration of such facilities.
- Result in additional population creating need for new or physically altered parks, the construction
 of which could cause significant environmental impacts, in order to maintain acceptable
 recreational facilities per capita ratio (specifically 3 acres of park per 1,000 persons).

Impact Evaluation

New or Altered Fire Protection Facilities

Significance Criterion a1: Would the proposed plan result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the 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?

Impact PS-1 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD INCREASE THE POPULATION OF PLEASANT HILL, GENERATING ADDITIONAL NEED FOR FIRE PROTECTION SERVICES. HOWEVER, COMPLIANCE WITH THE 2040 GENERAL PLAN WOULD RESULT IN IMPACTS RELATED TO THE NEED FOR NEW OR ALTERED FIRE FACILITIES THAT ARE LESS THAN SIGNIFICANT.

Construction

The 2040 General Plan would allow a net increase of approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in Pleasant Hill. As a result, CCCFPD could need to incrementally increase their fire protection services to the City of Pleasant Hill through the year 2040, which could in turn require the construction of new facilities to accommodate subsequent personnel, equipment, and vehicles. In addition, the proposed plan would allow for a net increase of 1,401,063 gross square feet of semi-public and institutional land uses that could include fire protection facilities. The specific placement and potential impacts of new fire protection facilities are unknown at this time; if construction or expansion of future facilities are needed or proposed, then separate environmental review would be required that could determine and require future project-specific construction-related mitigation measures. The 2040 General Plan would facilitate development within areas of Pleasant Hill that are currently developed. As such, construction of new fire protection facilities, if required, would likely occur on property previously disturbed or developed and, thus, within the programmatic analysis for buildout under the 2040 General Plan as analyzed throughout this EIR. Additionally, construction would be required to comply with all applicable federal, State, and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants. This includes the 2022 California Fire Code or its latest iteration, which contains project-specific requirements such as construction standards in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for sprinkler systems and minimum fire flow rates for water mains. This would reduce the potential for adverse construction impacts associated with construction of new or expanded fire facilities associated with implementation of the 2040 General Plan. Therefore, construction impacts related to potential need for new or expanded fire protection facilities would be less than significant.

Operation

As future buildout occurs under the 2040 General Plan, the CCCFPD will evaluate operations and deployment of services to efficiently use resources. Additionally, new development under buildout of the 2040 General Plan would be required to comply with all applicable Federal, State, and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants. This includes the 2022 California Fire Code or its latest iteration,

which contains project-specific requirements such as construction standards in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for sprinkler systems and minimum fire flow rates for water mains. Further, the 2040 General Plan would allow approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in the 2040 General Plan area, which would increase the demand for fire protection services. As a result, CCCFPD would need to incrementally increase their fire services to the City of Pleasant Hill through the year 2040.

In addition, the 2040 General Plan Public Facilities, Services, and Infrastructure Element contains a number of goals and associated policies, listed below, for providing adequate fire protection services in Pleasant Hill.

Goal PFS-8 Advocate for high-quality fire emergency response citywide to prevent and minimize injury, loss of life, and property damage.

Policy PFS-8.1	First Response Travel Time. Work with the CCCFPD to ensure that first response travel time is maintained and enhanced where possible.
Policy PFS-8.2	Emergency Response Facilities and Personnel. Work with the CCCFPD to continue to increase the emergency response facilities and personnel necessary to meet residential and employment growth in the city.
Policy PFS-8.3	Fire Safety Requirements for New Developments. Require new development to incorporate adequate emergency water flow, fire resistant design and materials, and evacuation routes.
Policy PFS-8.4	Emergency Vehicle Accessibility. New development shall incorporate necessary emergency vehicle access and not impede the ability of service providers to provide adequate emergency response.
Policy PFS-8.5	Secondary Emergency Access Route Requirement. Require secondary emergency access routes for all areas of the city currently lacking dual access.

Consistent with Policy PFS-8.2, as future buildout occurs under the 2040 General Plan, the City will evaluate operations and deployment of services to efficiently use resources and ensure that development does not exceed the service capacity of CCCFPD. Further, Policies PFS-8.3 and PFS-8.4 would ensure that development facilitated by the 2040 General Plan would be served by adequate water supplies and would comply with applicable fire access and building standards so that CCCFPD can continue to adequately serve the City. Because the 2040 General Plan regulates the provision of fire protection services concurrently with 2040 General Plan development and population growth, operational impacts related to provision of fire protection services would be less than significant.

In summary, there is potential for CCCFPD to increase staffing levels through the year 2040 to meet established standards under buildout of the 2040 General Plan. Because the 2040 General Plan regulates the provision of fire protection services concurrently with development and population growth, operational impacts related to provision of fire protection services would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

New or Altered Police Protection Facilities

Significance Criterion a2: Would the proposed plan result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the 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?

Impact PS-2 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD INCREASE POPULATION IN PLEASANT HILL, GENERATING ADDITIONAL NEED FOR POLICE PROTECTION SERVICES. HOWEVER, COMPLIANCE WITH 2040 GENERAL PLAN POLICIES WOULD RESULT IN IMPACTS RELATED TO THE NEED FOR NEW OR ALTERED POLICE FACILITIES THAT ARE LESS THAN SIGNIFICANT.

Construction

The 2040 General Plan would allow a net increase of approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in Pleasant Hill. As a result, PHPD could need to incrementally increase their police services through the year 2040, which could in turn require the construction of new facilities to house subsequent personnel, equipment, and vehicles. In addition, the proposed plan would allow for a net increase of 1,401,063 gross square feet of semi-public and institutional land uses that could include police protection facilities. The specific placement and potential impacts of new police facilities are unknown at this time; if construction or expansion of future facilities are needed or proposed, separate environmental review would be required that could determine and require future project-specific construction-related mitigation measures. The 2040 General Plan would facilitate development within areas of Pleasant Hill that are currently developed. Therefore, construction of new police facilities, if required, would likely occur on property previously disturbed or developed, and thus, within the programmatic analysis for buildout under the 2040 General Plan as analyzed throughout this EIR. This would reduce the potential for adverse construction impacts associated with construction of new or expanded police protection facilities associated with implementation of the 2040 General Plan. Thus, construction impacts related to potential need for new or expanded police protection facilities would be considered less than significant.

Operation

As future buildout occurs under the 2040 General Plan, the City will evaluate operations and deployment of services to efficiently use resources. New development under buildout of the 2040 General Plan would be required to comply with all applicable Federal, State, and local regulations governing the provision of police protection services, including adequate emergency access and community safety measures. Further, the 2040 General Plan would allow approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in Pleasant Hill. As a result, PHPD would need to incrementally increase their police services through the year 2040.

In addition, the 2040 General Plan Public Facilities, Services, and Infrastructure Element contains goals and associated policies, listed below, for providing adequate police protection services in Pleasant Hill.

Goal PFS-6 Provide high-quality public safety and crime reduction services to maintain a safe and secure community.

Policy PFS-6.1 Police Staffing. Maintain Police Department staffing levels in line with community needs.

Policy PFS-6.2 Development Review. Include the Police Department in the review of

development proposals to ensure that crime and safety issues are consistently addressed in the review of new development. Such review shall take a comprehensive approach to public safety and promote the implementation of Crime Prevention Through Environmental Design

principles, as appropriate.

Because the 2040 General Plan regulates the provision of police protection services concurrently with 2040 General Plan development and population growth, operational impacts related to provision of police protection services would be less than significant.

In summary, there is potential for PHPD to increase staffing levels through the year 2040 to meet established standards under buildout of the 2040 General Plan. Because the 2040 General Plan regulates the provision of police protection services concurrently with development and population growth, operational impacts related to provision of police protection services would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

New or Altered School Facilities

Significance Criterion a3: Would the proposed plan result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Impact PS-3 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD RESULT IN AN INCREASE IN POPULATION OF SCHOOL-AGED CHILDREN IN PLEASANT HILL. THIS WOULD INCREASE DEMAND FOR SCHOOL SERVICES AND POTENTIALLY CREATE THE NEED FOR NEW SCHOOL FACILITIES. OPERATIONAL IMPACTS OF NEW SCHOOL FACILITIES WOULD BE LESS THAN SIGNIFICANT WITH PAYMENT OF SCHOOL IMPACT FEES. HOWEVER, EVEN WITH COMPLIANCE WITH 2040 GENERAL PLAN POLICIES, IMPACTS RELATED TO THE CONSTRUCTION OF NEW OR ALTERED SCHOOL FACILITIES WOULD BE SIGNIFICANT AND UNAVOIDABLE DUE TO THE LARGE AMOUNT OF NEW SCHOOL LAND USES FACILITATED BY THE 2040 GENERAL PLAN.

Construction

The 2040 General Plan would allow a net increase of approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in Pleasant Hill. As a result, MDUSD could need to incrementally increase their school services to the City of Pleasant Hill through the year 2040, which could in turn require the construction of new facilities to accommodate subsequent students, staff, and facility space. In addition, the proposed plan would include 6,444,767 gross square feet of school uses. The specific placement and potential impacts of the new school facilities are unknown at this time; if construction or expansion of future facilities are needed, separate environmental review would be required, which could result in development and implementation of future projectspecific construction-related mitigation measures. The 2040 General Plan facilitates development within areas of Pleasant Hill that are currently developed. Therefore, construction of new school facilities, if required, would likely occur on property previously disturbed or developed and thus within the programmatic analysis for buildout under the 2040 General Plan as analyzed throughout this EIR. This would reduce the potential for adverse construction impacts associated with construction of new or expanded school facilities associated with implementation of the 2040 General Plan. However, given the large amount of net new school facilities anticipated under the proposed plan and the significant and unavoidable construction impacts associated with air quality, cultural resources, paleontological resources, and noise as discussed in Sections 3.2, Air Quality, 3.4, Cultural and Tribal Cultural Resources, 3.5, Geology, Soils, and Mineral Resources, and 3.10, Noise, respectively, it is conservatively concluded that construction impacts related to new or expanded school facilities would be significant and unavoidable.

Operation

Table 3.11-5 summarizes the potential increase in student population for MDUSD that could occur as a result of the 2040 General Plan, using the generation rates identified in Table 3.11-2.

Table 3.11-5 2040 General Plan Student Generation

Grade	Generation Rate per Single- Family Unit	Number of Net New Single- Family Units	Generation Rate per Multi-Family unit	Number of Net New Multi-Family Units	Total Students Generated
K – 6	0.172	7,150	0.253	12,066	4,283
7 – 8	0.046	7,150	0.064	12,066	1,101
9 – 12	0.077	7,150	0.117	12,066	1,962
Total	0.295	7,150	0.434	12,066	7,345

As shown above in Table 3.11-5, buildout of the 2040 General Plan would add approximately 7,345 students to MDUSD by 2040.

Although MDUSD has experienced a decline in enrollment in the last several years, the addition of 7,345 school students within Pleasant Hill could exceed anticipated school district capacity. Such potential additional students would increase enrollment in schools in Pleasant Hill. However, the proposed plan would facilitate development a net increase of 6,444,767 gross square feet of schools.

In addition, the 2040 General Plan Public Facilities, Services, and Infrastructure Element of the 2040 General Plan includes the following policy specific to education and the provision of school facilities in the City:

Policy PFS-9.2	High Quality Education. Support the efforts of local educational institutions and school districts to provide high-quality education and facilities.
Policy PFS-9.5	Support of School Upgrades. Support upgrading and updating public educational institutions, facilities, additions and improvements.
Policy PFS-9.6	Collection of School Impact Fees. Continue to collect Mt. Diablo Unified School District school impact fees for new residential development.

Policy PFS-9.2 would ensure that the City coordinates with MDUSD on long range planning efforts to facilitate MDUSD planning for future growth. As such, the City would work with MDUSD regarding new school land use needs by grade to ensure that new school facilities would accommodate anticipated student generation within Pleasant Hill associated with 2040 General Plan buildout. Further, all future development facilitated by 2040 General Plan is required to pay MDUSD school impact fees which, pursuant to Section 65995(3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), are "deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Because the 2040 General Plan regulates the provision of school services concurrently with 2040 General Plan development and population growth and with payment of mandatory MDUSD school impact fees by developers for future projects in the City, operational impacts related to provision of school services would be less than significant.

Mitigation Measures

MITIGATION MEASURE AQ-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO REDUCE CONSTRUCTION CRITERIA POLLUTANT EMISSIONS (SEE SECTION 3.2, AIR QUALITY, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE AQ-3: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO CONDUCT AND IMPLEMENT CONSTRUCTION HEALTH RISK ASSESSMENTS (SEE SECTION 3.2, AIR QUALITY, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-1: REVISE GENERAL PLAN IMPLEMENTATION PROGRAM M TO INCLUDE PREPARATION OF HISTORICAL RESOURCES EVALUATION PRIOR TO APPROVAL FOR PROJECTS INVOLVING BUILDINGS 45 YEARS OR OLDER AND IMPLEMENTATION OF MITIGATION PRIOR TO AND DURING CONSTRUCTION (SEE SECTION 3.4, CULTURAL AND TRIBAL CULTURAL RESOURCES, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-2: REVISED GENERAL PLAN IMPLEMENTATION PROGRAM M TO INCLUDE PREPARATION OF ARCHAEOLOGICAL RESOURCES ASSESSMENT PRIOR TO PROJECT APPROVAL AND IMPLEMENTATION OF MITIGATION PRIOR TO AND DURING CONSTRUCTION (SEE SECTION 3.10, Noise, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-3: REVISE GENERAL PLAN GOAL ENV-5 TO INCLUDE A POLICY TO STOP WORK IN THE EVENT OF UNANTICIPATED CULTURAL RESOURCES DISCOVERIES DURING CONSTRUCTION (SEE SECTION 3.10, Noise, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-4: REVISE GENERAL PLAN GOAL ENV-5 TO INCLUDE A POLICY TO SUSPEND WORK AROUND TRIBAL CULTURAL RESOURCES IDENTIFIED DURING CONSTRUCTION (SEE SECTION 3.4, CULTURAL AND TRIBAL CULTURAL RESOURCES, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE GEO-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO PROTECT PALEONTOLOGICAL RESOURCES (SEE SECTION 3.5, GEOLOGY, SOILS, AND MINERAL RESOURCES, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE NOI-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO IMPLEMENT CONSTRUCTION NOISE REDUCTION MEASURES (SEE SECTION 3.10, NOISE, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE NOI-2: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO IMPLEMENT A CONSTRUCTION VIBRATION CONTROL PLAN (SEE SECTION 3.10, NOISE, FOR FULL MITIGATION MEASURE TEXT)

Level of Significance
Significant and unavoidable

New or Altered Parks/Recreational Facilities

Significance Criterion a4: Would the proposed plan result in substantial adverse physical impacts

associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable

service ratios or other performance objectives?

Significance Criterion b: Would the proposed plan 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?

Significance Criterion c: Does the proposed plan include recreational facilities or require the

construction or expansion of recreational facilities which might have an

adverse physical effect on the environment?

Impact PS-4 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD RESULT IN AN INCREASE IN PLEASANT HILL POPULATION. THIS WOULD INCREASE DEMAND FOR AND USE OF PARKS AND POTENTIALLY CREATE THE NEED FOR NEW OR ALTERED PARK AND RECREATIONAL FACILITIES. HOWEVER, COMPLIANCE WITH 2040 GENERAL PLAN POLICIES WOULD RESULT IN IMPACTS RELATED TO INCREASED USE OR THE NEED FOR NEW OR ALTERED PARKS OR RECREATIONAL FACILITIES THAT ARE LESS THAN SIGNIFICANT.

Construction

The 2040 General Plan would allow a net increase of approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in Pleasant Hill, but the proposed 2040 General Plan does not include designation of additional land for parks, recreational facilities, or open space within the City. Consequently, existing parks and recreational facilities in Pleasant Hill could be used more frequently and potentially deteriorate at an accelerated pace and the Pleasant Hill Recreation and Park District could need to incrementally increase their parks and recreational services through the year 2040, which could in turn require the construction of new facilities to accommodate subsequent recreational visitors and facility space. If construction or expansion of future facilities is needed or proposed, then separate environmental review would be required that could determine and require future project-specific construction-related mitigation measures. The 2040 General Plan would facilitate development within areas of Pleasant Hill that are currently developed. Therefore, construction of new parks and recreational facilities, if required, would likely occur on property previously disturbed or developed and, thus, within the programmatic analysis for buildout under the 2040 General Plan as analyzed throughout this EIR. This would reduce the potential for adverse construction impacts associated with construction of new or expanded parks and recreational facilities associated with implementation of the 2040 General Plan. Thus, construction impacts related to potential need for new or expanded parks and recreational facilities would be considered less than significant.

Operation

The Pleasant Hill Recreation and Park District currently maintains 13 parks, one area of open space, and seven areas of undeveloped open space, totaling approximately 147 acres. Currently, there are approximately 4.3 acres of parkland per 1,000 residents in Pleasant Hill (147 acres of parkland

divided by 34 thousand residents). ¹² which exceeds the City's goal to provide three acres of developed parkland per 1,000 residents. As discussed in Section 3.9, *Land Use Planning, Population, and Housing,* the 2040 General Plan would add approximately 19,216 net new residential units to Pleasant Hill, which would support approximately 45,740 net new residents. The current (January 2022) population of Pleasant Hill is 34,026, and the proposed plan would result in a population of approximately 79,766 by 2040; thus, the 2040 General Plan would result in a ratio of 1.8 acres of developed parkland per 1,000 residents (147 acres of parkland divided by approximately 80 thousand residents). This would be below the City's target ratio of three acres of developed parkland per 1,000 residents. As such, implementation of the 2040 General Plan would require the development of additional parkland to maintain the City's established parkland to population ratio.

The 2040 General Plan would not include designation of additional land for parks or recreational facilities within the City. However, as discussed previously, the 2040 General Plan would facilitate the addition of approximately 45,740 residents in Pleasant Hill. To ensure that parkland and park access increase concurrently with population growth, the Open Space, Parks, and Recreation Element of the 2040 General Plan includes the goals and policies related to parks and recreation. Goals and policies from the 2040 General Plan related to park land, access, and recreation are as follows:

- Policy LU-1.2
- **City Image.** Continue efforts to define and enhance the City's image by emphasizing the high quality, intergenerational park facilities and recreational opportunities in the city; dedication to education, including the presence of Diablo Valley College and its potential to provide cultural and lifelong learning opportunities; and the vital, progressive nature of the city as a diverse residential community and a supportive environment for business.
- Policy LU-1.9
- **Connectivity Between Existing and New Development.** Encourage linking new development to existing development, parks, and trails through the creation of internal circulation systems that allow travel by foot, bicycles, vehicles, and other alternative modes of travel.
- Goal OSP-2 Support the Pleasant Hill Recreation and Park District's efforts to offer high-quality park, recreation (e.g., sports fields), and trail facilities for residents and visitors.
 - **Policy OSP-2.1** Recreation Facilities Planning. Plan for appropriate sites for new recreational facilities, including playing fields, tennis courts, and other facilities.
 - **Policy OSP-2.2** Recreational Programs for All. Advocate for and support PHRPD in their efforts to provide a wide range of recreation programs that are appropriate to a wide range of ages (e.g., youths, seniors), interests (e.g., sports, arts), and backgrounds which reflect Pleasant Hill's cultural diversity.
 - **Policy OSP-2.3 Expand Youth Programs.** Encourage new and expanded youth recreation and extracurricular educational programs.

¹² California Department of Finance. 2022. E-5 Population and Housing Estimates for Cities, Counties, and the State. https://dof.ca.gov/forecasting/demographics/estimates/ (accessed September 2022).

facilities.

Policy OSP-2.4 Accessibility for Persons with Disabilities. Advocate for and support PHRPD in their efforts to provide recreation programs accessible to those with disabilities and strive to improve accessibility of existing recreation programs. Policy OSP-2.5 Accessibility for Persons of All Income Levels. Advocate for and support PHRPD in their efforts to make all programs available regardless of participants' ability to pay, through scholarships, fee waivers, program cost underwriting, and other available methods. Policy OSP-2.6 Parkland Standard. Work with the PHRPD to establish and achieve a standard of 3 acres of developed parkland per 1,000 population. Policy OSP-2.7 Expand Recreation and Park Facilities. Work with the PHRPD in supporting implementation outlined in the 2020 Parks, Facilities & Recreation Master Plan to facilitate development and expansion of recreation and park

Policy OSP-2.8 Equitable Access to all Parkland. Work with the PHRPD to identify parcels for new parks and open space preservation to ensure all residents have access to parkland within a one-mile radius of their place of residence regardless of socio-economic status.

Policies OSP-2.1 through OSP-2.5 would ensure that the City would continue to plan for parks and recreational facilities through the year 2040. Further, Policies OSP-2.6 and OSP-2.8 would facilitate the addition of parkland in Pleasant Hill in a manner that would meet the City's standard of three acres of developed parkland per 1,000 residents. These policies would increase the amount of parkland available to City residents, which currently exceeds the City's standard of 3 acres per 1,000 residents. The provision of parkland in accordance with this standard would ensure that substantial physical deterioration of existing parks would not occur or be accelerated. Because the 2040 General Plan and the Municipal Code regulate provision of parkland concurrently with development and population growth and because of substantial parkland available immediately outside of City Limits and with payment of mandatory parkland impact fees by developers for future projects in the City, operational impacts related to provision of, access to, and potential deterioration of parks and recreation facilities would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Need for New or Altered Library Facilities

Significance Criterion a5: Would the proposed plan result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Impact PS-5 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD RESULT IN AN INCREASE IN THE CITY'S POPULATION. THIS WOULD INCREASE DEMAND FOR PUBLIC FACILITIES, SPECIFICALLY LIBRARIES, AND POTENTIALLY CREATE THE NEED FOR NEW LIBRARIES. HOWEVER, COMPLIANCE WITH 2040 GENERAL PLAN POLICIES WOULD RESULT IN IMPACTS RELATED TO NEED FOR NEW OR ALTERED PUBLIC FACILITIES THAT ARE LESS THAN SIGNIFICANT.

Construction

The 2040 General Plan would allow approximately 19,216 residential units and facilitate the addition of 45,740 net new residents in Pleasant Hill. The proposed 2040 General Plan does not include designation of additional land for libraries or other public facilities within the City that would require construction and might have an adverse physical effect on the environment. However, the proposed plan would allow for a net increase of 1,401,063 gross square feet of semi-public and institutional land uses, which could include library facilities. Additionally, Contra Costa County Libraries could need to incrementally increase their library services to the City of Pleasant Hill through the year 2040, which could in turn require the construction of new facilities to accommodate subsequent library visitors and facility space. The specific placement and potential impacts of a new library facilities are unknown at this time; if construction or expansion of future facilities are needed or proposed, separate environmental review would be required that could determine and require future project-specific construction-related mitigation measures. The 2040 General Plan would facilitate development within areas of Pleasant Hill that are currently developed. Therefore, construction of new library facilities, if required, would likely occur on property previously disturbed or developed, and thus, within the programmatic analysis for buildout under the 2040 General Plan as analyzed throughout this EIR. This would reduce the potential for adverse construction impacts associated with construction of new or expanded library facilities associated with implementation of the 2040 General Plan. Thus, construction impacts related to potential need for new or expanded library facilities would be considered less than significant.

Operation

The 2040 General Plan would facilitate the addition of approximately 45,740 residents in Pleasant Hill. An increase in population would increase demand for public facilities.

In addition to 2040 General Plan goals and policies already listed in this section, goals and policies from the Land Use Element of the 2040 General Plan support enhancement of Pleasant Hill's existing public facilities and encourage adaptations in the future to meet the City's needs. Relevant goals and policies are listed below.

Policy LU-3.4 Clustering Development. Encourage new residential development to be clustered to support increased densities, open space, and efficiencies of public facilities and services.

Policy LU-5.2 Costs of Growth. Require that new development pays its fair share of costs associated with the overall growth in the region.

Policy LU-5.3 Compliance with Performance Standards. Require that all new development comply with the City's performance standards for fire, police,

parks, water, flood control, sanitary sewer, and transportation facilities.

Policy LU-5.5 Development Contribution Requirement. Require all new development to

contribute to or participate in the improvement of park, school, police, sanitary, water, and flood control services in proportion to the demand

generated by the development's occupants and users.

Policy LU-5.6 Fiscal and Economic Impact. Consider fiscal impact analyses for major

development proposals to identify any burden or unintended negative economic impacts on the City, the school district, or other public agencies

and to ensure the burdens are sufficiently mitigated.

Goal PFS-10 Ensure access to library facilities and services to meet the education and informational needs of the community.

Policy PFS-10.1 City Library Facility. Ensure that the City Library facility continues to provide high-quality services and education forums for residents and seeks to serve

all members of the community.

Policy LU-3.4 and Policies LU-5.2 through LU-5.6 would ensure that adequate public facilities, including fire, police, public school, recreation, and library facilities, are planned to support current and future residents of Pleasant Hill. Policy LU-3.4 would support the efficiency of public services and the provision of parks and open space, and Policy LU-5.3 would ensure that existing performance standards for fire, police, parks, and other facilities are maintained as future development occurs. Policies LU-5.2, LU-5.5, and LU-5.6 would ensure that development facilitated by the 2040 General Plan would pay its fair share of costs and impacts to parks, schools, police, and other public services. Finally, Goal PFS-10 and Policy PFS-10.1 would ensure the provision of library services to residents of Pleasant Hill. With implementation of the goals and policies included in the 2040 General Plan, impacts related to public facilities, including libraries, associated with development facilitated by the 2040 General Plan would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

3.11.5 Cumulative Impacts

The geographic scope of the cumulative public services analysis is the service areas of the Contra Costa County Fire Protection District (CCCFPD), the Pleasant Hill Police Department (PHPD), Mt. Diablo Unified School District (MDUSD), and the Contra Costa County Library system. In addition, the geographic scope of the cumulative recreation analysis consists of the local community and regional parks within the boundary of the City of Pleasant Hill and include parks and recreational facilities managed by Contra Costa County. Because of differences in the nature of the public service

topical areas, they are discussed separately. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Pleasant Hill, Martinez, Lafayette, Clayton, Danville, Pittsburg, and Contra Costa County, in addition to the proposed plan.

Fire Protection Facilities

The CCCFPD service area consists of the jurisdictional limits of Contra Costa County, which encompasses approximately 304 square miles. Cumulative development in Pleasant Hill would result in predominantly residential and commercial development. These types of development would increase the permanent resident and daytime population of the City. The increase in population would result in an increased demand for fire protection facilities. However, the need for fire protection services is gradual as development occurs. To help offset the increased demand, the cumulative plans and projects would be required to pay all applicable review and development impact fees to the CCCFPD. Cumulative developments would be in compliance with the California Fire Code, Part 9 of the CBC and would follow standards for fire safety such as fire flow requirements for buildings, fire hydrant location and distribution criteria, automated sprinkler systems, and fire-resistant building materials. For these reasons, the cumulative projects would not result in the need to construct new or expand existing fire protection or emergency medical services facilities beyond those anticipated for expected population growth. Therefore, the cumulative impact related to fire protection facilities would be less than significant.

Police Protection Facilities

The PHPD service area is within the city limits of Pleasant Hill. Cumulative development in Pleasant Hill would result in predominantly residential and commercial development. These types of development would increase the permanent resident and daytime population. The increase in population and development would result in an increased demand for police protection facilities. Cumulative plans and projects within the service area of the PHPD would be reviewed for impacts on police protection services, would be required to address any potential impacts with mitigation, and would need to provide adequate emergency access for police services with proper signage and lighting. Because demand for law enforcement services is highly dependent on a number of factors that vary substantially by project (clientele, hours of operation, crime prevention measures, etc.), it is unlikely that there would be substantial overlap in demand that would result such that new facilities are necessary. Therefore, the cumulative impact related to police protection facilities would be less than significant.

School Facilities

Pleasant Hill is served by MDUSD with a service area including Pleasant Hill, Clayton, and Concord; portions of Martinez, Pittsburg, and Walnut Creek; and surrounding unincorporated communities. Cumulative projects would result in predominantly residential and commercial development; residential development would increase permanent population, increasing demand for school facilities. Implementation of the 2040 General Plan, in addition to the General Plans of surrounding cities including but not limited to Lafayette, Concord, Martinez, Pittsburg, and Walnut Creek, would also add residential units to their respective plan areas and would result in an increase in schoolaged residents. Although cumulative projects would be required to pay development impact fees towards school operation, construction of cumulative school facilities could result in significant and

unavoidable impacts related to air quality, noise, cultural resources, and paleontological resources. Therefore, the cumulative impact related to school facilities would be significant and unavoidable.

Library Facilities

The geographic scope for the cumulative analysis of other public facilities analysis is the service area of the Contra Costa County Library system, which includes the existing Pleasant Hill library. Cumulative plans and projects, mainly the residential projects, may also result in the increase in library use. Contra Costa County Libraries could need to incrementally increase their library services to the cities of Pleasant Hill, Martinez, Lafayette, Clayton, Danville, Pittsburg, and Contra Costa County through the year 2040, which could in turn require the construction of new facilities to accommodate subsequent library visitors and facility space. The proposed plan in conjunction with other cumulative plans and projects listed in Table 3-1 would facilitate development in areas that are currently developed; therefore, construction of new Contra Costa County Libraries facilities, if required, would likely occur on property previously disturbed or developed. This would reduce the potential of adverse construction impacts associated with construction of new or expanded library facilities. Therefore, the cumulative impact related to library facilities would be less than significant.

Recreation and Park Facilities

The implementation of the proposed plan in conjunction with the cumulative plans and projects listed in Table 3-1 would result in residential and commercial developments in and near Pleasant Hill. Such cumulative development would be expected to permanently increase residents, which would increase cumulative demand for park facilities. The greater use of parks and recreational facilities in Pleasant Hill could result in physical deterioration of existing parks. However, population growth is only one factor in determining whether parks and recreational facilities would deteriorate through increased use. Other variables include park design, age, infrastructure, and park use. To further offset demand, the cumulative plans and projects would be required to demonstrate compliance with applicable design guidelines established in the proposed 2040 General Plan. In addition, cumulative development would be subject to parkland dedication requirements or in-lieu parkland fees. Pleasant Hill also continues to retain, enhance, and expand park and recreation facilities throughout the City limits, as well as continues to assess its current and future park needs. With payment of park impact fees by cumulative development, there would be limited potential physical deterioration of existing parks and recreational facilities due to increased use. Therefore, the cumulative impact related to recreational and park facilities would be less than significant.

Overall Level of Cumulative Significance

Significant and unavoidable

3.12 Transportation

3.12.1 Introduction

This section describes existing conditions related to roadway, transit, bicycle, and pedestrian circulation systems, as well as the relevant regulatory framework. This section also evaluates impacts of the 2040 General Plan related to the potential for conflict with existing programs, plans, ordinances, or policies addressing the circulation system; conflict with *CEQA Guidelines* Section 15064.3(b); increase hazards due to geometric design features; or result in inadequate emergency access. The information in this section is primarily based on the findings of the Pleasant Hill 2040 General Plan Transportation Impact Analysis (TIA), which is included as Appendix E to this EIR.

3.12.2 Environmental Setting

Roadway System

There is a natural hierarchy of streets in Pleasant Hill that provide various levels of access and mobility, with regional highways (Interstate 680 [I-680], State Route [SR] 4, SR 242, and SR 24) accommodating the highest volumes and speeds, major cross-town arterial streets connecting to freeways and operating at moderate speeds and/or volumes, and local collector roads that link neighborhoods, parks, and schools to the cross-town streets and to each other, with many of these serving adjacent development and neighborhoods.

Regional Highways

Interstate 680, State Route (SR) 4, SR 242, and SR 24 are the primary routes connecting Pleasant Hill (the plan area) to the region. Figure 3.12-1 presents the location of the following key regional highways within Pleasant Hill.

I-680 is a north-south freeway which generally runs along the eastern edge of Pleasant Hill and connects Interstate 80 in Fairfield to US 101 and Interstate 280 in Santa Clara County.

SR 4 is an east-west four-to-six-lane freeway which connects Interstate 80 in Pinole to eastern Contra Costa County and San Joaquin County.

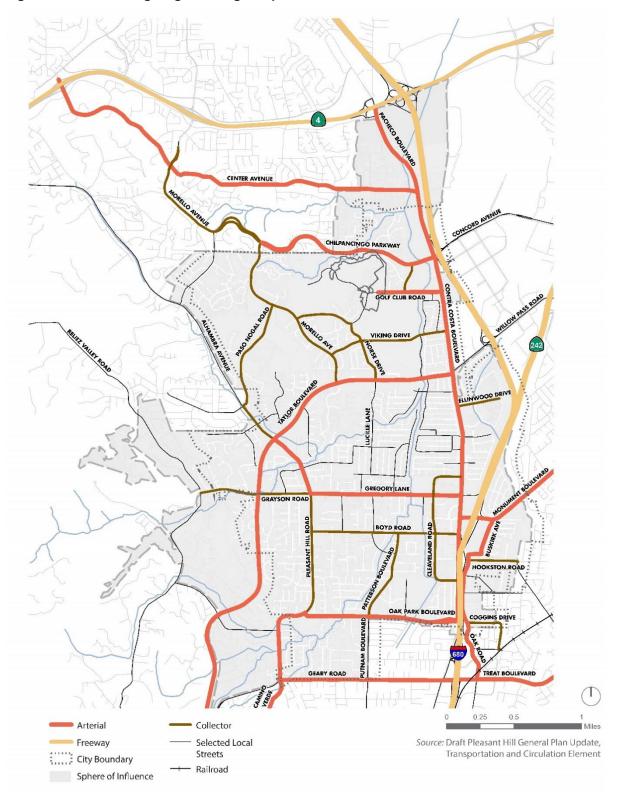
SR 242 is a north-south freeway that traverses through the east side of Pleasant Hill connecting I-680 to SR 4.

SR 24 is an east—west highway that serves the eastern San Francisco Bay Area. This freeway connects the Interstate 580/Interstate 980 interchange in Oakland to the I-680 junction in Walnut Creek. Both Taylor Boulevard and Pleasant Hill Road traversing through the City of Pleasant Hill intersect SR 24 via the City of Lafayette.

Arterials and Collectors

Arterials are major streets carrying the traffic of local and collector streets to and from freeways and other major streets. Collectors are streets for traffic moving between arterial and local streets, generally providing direct access to properties. Local streets provide direct access to properties and are often designed to discourage commute traffic.

Figure 3.12-1 Existing Regional Highways



KEY PLEASANT HILL (GENERAL PLAN AREA) ARTERIALS

Buskirk Avenue – A north-south arterial street with traffic signals at Monument Boulevard, along the Crossroads Shopping Center, Claire Drive, Mayhew Way, and Oak Park Boulevard-Coggins Drive. Buskirk Avenue serves a variety commercial retail and residential land uses and is often utilized by through traffic traveling south from Monument Boulevard to the Pleasant Hill / Contra Costa Centre Bay Area Rapid Transit (BART) Station and destinations in Walnut Creek and Concord.

Chilpancingo Parkway – An east-west arterial street that connects to Concord Avenue from the east to Morello Avenue to the west in the City of Martinez. Existing traffic signal connections in Pleasant Hill include Contra Costa Boulevard and Old Quarry Road. I-680 access is provided via the interchange at Contra Costa Boulevard. Chilpancingo Parkway attracts regional traffic due to Diablo Valley College and adjacent shopping districts. Chilpancingo Parkway also serves adjacent commercial and medium-density multifamily residential development. The eastern extension of this parkway is Concord Avenue, a major access route to Downtown Concord.

Contra Costa Boulevard – A north-south arterial street traversing the city parallel to I-680 with freeway access at several locations. Contra Costa Boulevard continues as Pacheco Boulevard north of the North City Limit and connects to North Main Street in Walnut Creek to the south. The boulevard serves as the City's primary thoroughfare traversing the length of the city and connecting various commercial and business developments, as well as Diablo Valley College (via Viking Drive and Golf Club Road). Contra Costa Boulevard is designated a Route of Regional Significance.

Geary Road – An east-west arterial street connecting the Lafayette/SR 24 area via Pleasant Hill Road to the east to Walnut Creek/I-680 along the south edge of the city. Geary Road serves regional traffic and provides a direct connection to the Pleasant Hill / Contra Costa Centre BART Station. Geary Road serves as the City's southern border with the City to Walnut Creek and provides direct access to various residential and commercial retail districts. Geary Road is designated a Route of Regional Significance.

Gregory Lane – An east-west arterial street connecting Pleasant Hill Road to Contra Costa Boulevard. Gregory Lane begins at its east end as an off-ramp from southbound I-680. West of Pleasant Hill Road, Gregory Lane becomes Grayson Road, a two-lane collector terminating at Reliez Valley Road. Gregory Lane serves east-west traffic through-traffic including residential, church, retail, and office land uses.

Golf Club Road – An east-west four-lane divided arterial street connecting Contra Costa Boulevard to Paso Nogal Road, narrowing to a two-lane road west to its terminus at Contra Costa Country Club. Golf Club Road provides access to residential uses, Diablo Valley College, and several retail centers.

Monument Boulevard – An east-west arterial street connecting Contra Costa Boulevard to Cowell Road and Galindo Street in downtown Concord (the City limits are located just west of Mohr Lane). Monument Boulevard provides regional access to downtown Pleasant Hill and the Crossroads Shopping Center via a single-point urban interchange on I-680.

Oak Park Boulevard – An east-west arterial street connecting Pleasant Hill Road to Interstate 680, where it becomes Coggins Drive, a collector serving the Pleasant Hill / Contra Costa Centre BART Station area. The boulevard serves both regional traffic and local residential and commercial land uses.

Pleasant Hill Road and Alhambra Avenue – A north-south arterial street that connects Geary Road in Walnut Creek to the south to Alhambra Avenue in Martinez to the north. Pleasant Hill Road/Alhambra Avenue serves intra-city and regional travel and provides local access to adjacent residential areas and a school. Pleasant Hill Road/Alhambra Avenue is designated a Route of Regional Significance north of the Taylor Boulevard intersection.

Taylor Boulevard – An arterial street connecting Pleasant Hill Road to Contra Costa Boulevard, continuing as Sunvalley Boulevard east to I-680, and as Willow Pass Road east of I-680 into Concord. Taylor Boulevard carries both local and regional traffic. Due its regional connectivity, controlled intersections, and limited driveway access, Taylor Boulevard is prone to higher speeds (45 – 55 mph). Taylor Boulevard, its extension to I-680 via Sunvalley Boulevard, as well as its extension to SR 24 via Pleasant Hill Road, is designated a Route of Regional Significance.

KEY PLEASANT HILL (GENERAL PLAN AREA) COLLECTORS

Collectors provide access between arterials and local roadways. They connect adjacent neighborhoods, link neighborhoods to arterial streets, and carry through-traffic in residential, industrial, and commercial areas. Primary collectors in Pleasant Hill include:

Boyd Road – An east-west collector street linking Contra Costa Boulevard with Pleasant Hill Road and serving the magnet schools of Sequoia Elementary and Sequoia Middle schools that serve communities inside and outside the City.

Coggins Drive – An east-west collector street connecting Buskirk Avenue-Oak Road at Oak Park Boulevard to the eastern city limit, where it turns south and continues as a county roadway adjacent to the Iron Horse Regional Trail.

Cleaveland Road – A short north-south street connecting Downtown Pleasant Hill, Contra Costa Boulevard, and North Main Street.

Ellinwood Drive – A short east-west collector street connecting Contra Costa Boulevard to residential and commercial development between Contra Costa Boulevard and I-680.

Grayson Road – An east-west collector street extending west from Gregory Lane at Pleasant Hill Road to Reliez Valley Road at the entrance to Oakmont Memorial Park.

Hookston Road – A short two-lane east-west collector street connecting Buskirk Avenue south of the Crossroads Shopping Center to Bancroft Road. Hookston Road extends further east as a local roadway serving a residential area.

Morello Avenue – A north-south collector street connecting Chilpancingo Parkway to Taylor Boulevard. Morello Avenue provides access to Diablo Valley College via Viking Drive and Paso Nogal Road and extends north to Martinez from the intersection at Chilpancingo Parkway.

Norse Drive – A north-south collector street connecting Paso Nogal Road with Taylor Boulevard.

Old Quarry Road – A short north-south collector street connecting Chilpancingo Parkway and Golf Club Road, providing access to Diablo Valley College at Golf Club Road.

Paso Nogal Road – A curving collector street connecting Alhambra Avenue/Pleasant Hill Road just north of the city limits to Morello Avenue and extending from Morello Avenue at a separate intersection to Golf Club Road. Paso Nogal Road provides access to Diablo Valley College via its connection to Golf Club Road and serves direct residential access between Alhambra Avenue/Pleasant Hill Road and Morello Avenue.

Patterson Boulevard and Putnam Boulevard – A north-south collector street connecting Boyd Road to Oak Park Boulevard. Patterson Boulevard serves direct residential access as well as through trips, and extends to the south into Walnut Creek as Putnam Boulevard.

Viking Drive – An east-west collector street connecting Morello Avenue to Contra Costa Boulevard, providing access to Diablo Valley College, College Park High School, Valley View Middle School, and providing direct residential access.

Truck Routes

GENERAL PLAN AREA

The City of Pleasant Hill is authorized to restrict commercial vehicles to operate on only a portion of the public roadway system, and to set weight limits or size restrictions. Exceptions include highways such as I-680, SR 4, SR 24, and SR 242. Generally, most trucks use arterial roadways to reach commercial areas or industrial areas within Pleasant Hill. The layout of the roadway network generally discourages freight cut-through traffic within the City, and thus most truck trips within the City are for deliveries or pick-ups.

Emergency Vehicle Routes

CONTRA COSTA COUNTY

The Contra Costa County Office of the Sheriff, Emergency Services Division and Contra Costa County Office of Emergency Services (OES) coordinates countywide preparedness, response and protection services and activities for large scale incidents and disasters. Within Contra Costa County, the main routes into and out of the County that would most likely be used as evacuation routes are I-680, I-80, SR 24, SR 4, San Pablo Dam Road, Vasco Road, San Pablo Avenue, and Richmond Parkway.

GENERAL PLAN AREA

The Pleasant Hill OES are responsible for planning, outreach, and training or disaster management and emergency preparedness for the City. The main routes into and out of Pleasant Hill that would most likely be used as evacuation routes are I-680, SR 24, SR 4, and SR 242.

Pedestrian and Bicycle Facilities

This section describes the existing pedestrian and bicycle network in the 2040 General Plan area.

Pedestrian Facilities in General Plan Area

The City's pedestrian facilities consist of sidewalks, crosswalks, pedestrian signals, curb ramps, and pedestrian-scale street lighting, as well as the Contra Costa Canal Trail which runs north-south through the City and connects to the Iron Horse Regional Trail, and several other shorter off-road pathways. The Contra Costa Canal Trail and Iron Horse Regional Trail help provide access to commercial and residential areas, schools, public transportation, and other community facilities throughout Pleasant Hill and its surrounding communities.

While sidewalks are provided on many City streets, some streets have gaps in the sidewalk network. In addition, walking can be uncomfortable on higher-traffic, higher-speed streets such as Contra Costa Boulevard, Taylor Boulevard, Gregory Lane, and others. Such streets present an obstacle for

pedestrians needing to cross the street, as does I-680. These barriers can discourage walking as a means to get to work, school, shopping, and recreational destinations.

The City's Draft Bicycle and Pedestrian Master Plan (BPMP) (in progress as of December 2022) will guide the expansion and improvement of pedestrian facilities citywide.

Bicycle Facilities in General Plan Area

Four categories of bikeways are specified in the Caltrans Highway Design Manual and Sections 885.1 et seq. of the California Streets and Highways Code¹. These categories are:

- Class I Bikeway (Bike Path): Bike paths provide a completely separate right-of-way and are
 designated for the exclusive use of people riding bicycles and walking with minimal cross-flow
 traffic
- Class II Bikeway (Bike Lane): Bike lanes provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bike lanes may be enhanced with painted buffers between vehicle lanes and/or parking, and green paint at conflict zones (such as driveways or intersections).
- Class III Bikeway (Bike Route): Bike routes provide enhanced mixed-traffic conditions for bicyclists through signage, striping, and/or traffic calming treatments, and provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike trails or bike lanes, or along low-volume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes by encouraging slow speeds and discouraging non-local vehicle traffic, often using traffic calming measures. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.
- Class IV Bikeway (Separated Bikeway): Separated Bikeways, also referred to as cycle tracks or
 protected bikeways, are bikeways for the exclusive use of bicycles which are physically
 separated from vehicle traffic. Separations may include grade separation, flexible posts, physical
 barriers, or on-street parking.

Existing and planned bicycle facilities in Pleasant Hill are shown in the City of Pleasant Hill Draft BPMP. Existing and recommended major bicycle facilities are presented on Figure 3.12-2. The network includes bicycle facility gap closures on key routes, bicycle facilities, and bicycle facility upgrades (e.g., from Class III to Class I, Class II, or Class IV). The recommended network would create a more complete and connected bicycle network within Pleasant Hill and connect bicyclists to high-demand destinations within and adjacent to the city.

¹ California Department of Transportation (Caltrans) 2020. Highway Design Manual. Seventh Edition. December 31, 2020. https://dot.ca.gov/-/media/dot-media/programs/design/documents/hdm-complete-12312020a11y.pdf (accessed October 2022).

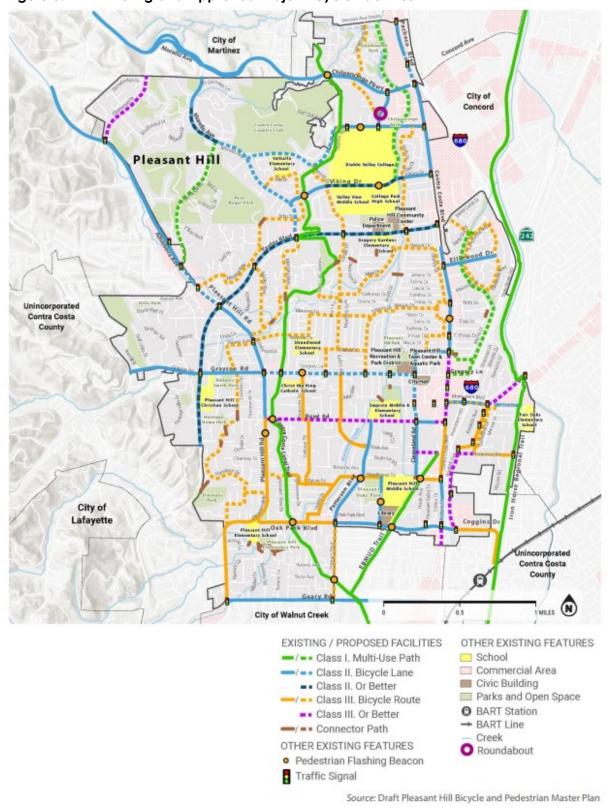


Figure 3.12-2 Existing and Approved Major Bicycle Facilities

Transit Service

Pleasant Hill's central location within the East Bay provides access to surrounding cities and communities, as well as to other parts of the San Francisco Bay Area. While the suburban setting lends itself to vehicular use as a preferred mode of travel, many trips can be made by public transit. The City's transit services are described below. Existing transit lines and stops are shown in Figure 3.12-3.

Bay Area Rapid Transit

SAN FRANCISCO BAY AREA REGION

BART currently operates over 130 miles of double-track, rapid rail service, serving 50 stations and over three million people in five densely populated Bay Area Counties: Contra Costa, Alameda, San Francisco, Santa Clara, and San Mateo². As of 2022, BART carries more than 400,000 riders per weekday. The Pleasant Hill BART Station is located just southeast of the City of Pleasant Hill limits and Sphere of Influence within unincorporated County area, at Contra Costa Centre. The station provides connections for all modes of travel and serves as a transit village for local and regional transit services. The BART Yellow Line serves travel between Pittsburg/Antioch and San Francisco, including the San Francisco International Airport (SFO) (as shown in Figure 3.12-3). Via connections in Oakland, riders can travel to Oakland International Airport (OAK), Richmond, Milpitas, and Dublin/Pleasanton. Contra Costa Centre is also home to several regional and local bus routes with service to San Francisco, Oakland, Sacramento, Fairfield, Vallejo, and Pleasanton/Dublin. In addition to the Contra Costa County Transit Authority's County Connection routes, described below, regional connections are provided by Fairfield and Suisun Transit, Solano Express, and Wheels Express.

GENERAL PLAN AREA

There are no BART stations within the Pleasant Hill city limits or Sphere of Influence.

County Connection

CONTRA COSTA COUNTY

County Connection currently provides fixed route and paratransit bus service throughout the communities of Concord, Pleasant Hill, Martinez, Walnut Creek, Clayton, Lafayette, Orinda, Moraga, Danville, San Ramon, as well as unincorporated communities in Central Contra Costa County. County Connection operates a fleet of 125 fully accessible transit buses and 63 paratransit vehicles. Service is provided from approximately 6:00 a.m. to 9:00 p.m. on weekdays, and from approximately 9:00 a.m. to 7:00 p.m. on weekends.⁴

GENERAL PLAN AREA

County Connection routes traverse the City, providing access to Diablo Valley College, Pleasant Hill BART, Downtown Pleasant Hill, the Martinez Amtrak Station, and other key destinations (refer to Figure 3.12-3). Routes within Pleasant Hill travel on and make frequent stops along major arterials, such as SR 4, Alhambra Avenue, Contra Costa Boulevard, Gregory Lane, and Oak Park Boulevard.

² BART. 2022a. BART Facts 2022. https://www.bart.gov/sites/default/files/docs/BARTFacts2022.pdf (accessed October 2022).

³ BART, 2022b. Ridership Watch. https://www.bart.gov/news/articles/2020/news20200225#charts (accessed October 2022).

⁴ County Connection. 2022. About Us. https://countyconnection.com/about/ (accessed November 2022).

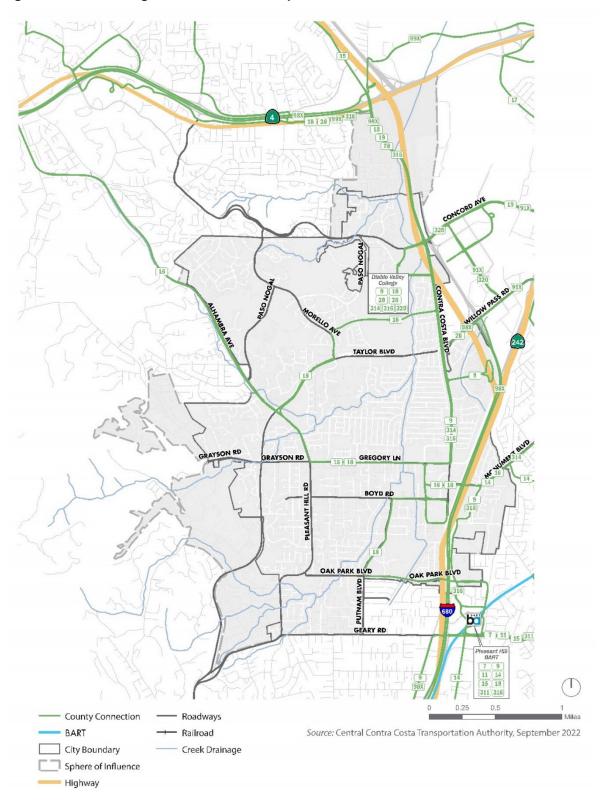


Figure 3.12-3 Existing Transit Lines and Stops in General Plan Area

Aviation Facilities

The City of Pleasant Hill is served by SFO and OAK. SFO enplaned and deplaned over 16 million passengers in 2020 and facilitated takeoffs of air carriers, regional jets, general aviation propeller aircraft, commuter propeller aircraft, business jets, fixed-wing military aircraft, and both civilian and military helicopters. SFO is approximately 26 miles southwest of the City. OAK served approximately 13.4 million passengers in 2019, and serves major all-cargo carriers such as FedEx and UPS. OAK is approximately 15 miles southwest of the City. Additionally, the Buchanan Field Airport is less than 0.5 miles northeast of the General Plan area, which is a small airport primarily serving charter aircrafts, private aircrafts, and student pilots.

3.12.3 Regulatory Framework

Federal Regulations

Americans with Disabilities Act of 1990

The Americans with Disabilities Act (ADA) of 1990 provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for people with disabilities. To implement this goal, the United States Access Board, an independent Federal agency created in 1973 to ensure accessibility for people with disabilities, has created accessibility guidelines for public rights-of-way. While these guidelines have not been formally adopted, they have been widely followed by jurisdictions and agencies nationwide in the last decade. The guidelines, last revised in July 2011, address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

Federal Highway Administration

The FHWA is the agency of the United States Department of Transportation responsible for the federally funded roadway system, including the interstate highway network and portions of the primary State highway network. FHWA funding is provided through the Fixing America's Surface Transportation Act. Federal funds can be used to fund eligible local transportation improvements in such as projects to improve the efficiency of existing roadways, traffic signal coordination, bikeways, pedestrian facilities, and transit system upgrades.

State Regulations

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law. SB 743 changed the way transportation impact analysis is conducted as part of CEQA compliance. These changes eliminated automobile delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts under CEQA.

Prior rules treated automobile delay and congestion as an environmental impact. SB 743 requires the *CEQA Guidelines* to prescribe an analysis that better accounts for transit and reductions of

⁵ SFO. 2020. SFO Fact Sheet Calendar Year 2020. https://www.flysfo.com/sfo-fact-sheet (accessed October 2022).

⁶ Oakland International Airport. 2021. Terminal Modernization and Development Project EIR. https://www.oaklandairport.com/wp-content/uploads/2021.05.25-Fact-Sheet-FINAL.pdf (accessed October 2022).

greenhouse gas emissions. In December 2018, Office of Planning and Research (OPR) released the final update to *CEQA Guidelines* consistent with SB 743, which recommends using vehicle miles traveled (VMT) as the most appropriate metric of transportation impact to align local environmental review under CEQA with California's long-term greenhouse gas emissions reduction goals. The *Guidelines* require all jurisdictions in California to use VMT-based thresholds of significance no later than July 1, 2020.

At the same time as the release of the updated *CEQA Guidelines*, OPR also released a non-binding *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which outlines potential VMT analysis methodologies and thresholds of significance for use by agencies in California based on substantial evidence developed by OPR related to achievement of the State's greenhouse gas emissions reductions targets.⁷

Senate Bill 32 and Senate Bill 375

On September 8, 2016, the governor signed SB 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation.

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach greenhouse gas emissions goals by directing the California Air Resources Board to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations.

Assembly Bill 747 and Senate Bill 99

Assembly Bill (AB) 747 (2019) requires that the safety element be reviewed and updated to identify vehicle evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. This will be a requirement for all safety elements or updates to hazard mitigation plans completed after January of 2022.

SB 99 (2019) requires review and update of the safety element to include information to identify residential developments in hazard areas that do not have at least two vehicle emergency evacuation routes. In essence, this legislation assists in identifying neighborhoods and households within a hazard area that have limited vehicle accessibility. This is intended to assist the City with identifying opportunities to improve connectivity and evacuation capacity (generally).

Assembly Bill 43

AB 43, also known as Traffic Safety, allows local government agencies to reduce vehicle speeds to accommodate vulnerable users such as pedestrians, bicyclists, seniors, and wheelchair users to improve traffic safety. AB 43 takes effect in July 2024.

⁷ OPR. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf (accessed October 2022).

The City of Pleasant Hill can evaluate changes to its speed limit practices as AB 43 takes effect following adoption of the 2040 General Plan.

California Department of Transportation Planning Documents

Caltrans is responsible for planning, designing, constructing, operating, and maintaining the State highway system. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the highway system, including ramps and access points, within the study area would need to be approved by Caltrans. The following Caltrans planning documents emphasize the State of California's focus on transportation infrastructure that supports mobility choice through multimodal options, smart growth, and efficient development.

- Smart Mobility 2010: A Call to Action for the New Decade (Smart Mobility Framework)
- Complete Streets Implementation Action Plan
- Strategic Plan 2020-2024
- California Transportation Plan 2050

SMART MOBILITY FRAMEWORK

The purpose of the Smart Mobility Framework, published in February 2010, is to address the State mandate to find solutions to climate change, reduce per capita VMT, and create a safe and equitable transportation system. The Smart Mobility Framework includes 10 implementing themes to achieve its purpose, including integration into Caltrans and other transportation agencies' policy and practice, collection of data and tools to implement the Smart Mobility Framework, undertaking of major cross-functional initiatives, and integration into local government land use and transportation planning.

COMPLETE STREETS IMPLEMENTATION ACTION PLAN

On September 30, 2008, the California Complete Streets Act of 2008 was signed into law. As of January 2011, AB 1358 requires any substantive revision of the circulation/mobility element of a city or county's general plan to identify how they will safely accommodate the circulation of all users of the roadway including pedestrians, bicyclists, children, seniors, individuals with disabilities, and transit riders, as well as motorists.

The City of Pleasant Hill adopted its Complete Streets policy on January 28, 2013.

CALTRANS DEPUTY DIRECTIVE 64-R1: COMPLETE STREETS – INTEGRATING THE TRANSPORTATION SYSTEM

In 2001, Caltrans adopted Deputy Directive 64; a policy directive related to non-motorized travel throughout the State. In October 2008, Deputy Directive 64 was strengthened to reflect changing priorities and challenges. Deputy Directive 64-R1 states:

The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit riders, contributes to the Department's mission/vision: "Improving Mobility across California."

⁸ Caltrans. 2010. Smart Mobility 2010. February 2010. https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/office-of-smart-mobility-and-climate-change/smf-handbook-062210-a-a11y.pdf (accessed October 2022).

Successful long-term implementation of this directive is intended to result in more options for people to go from one place to another, less traffic congestion and greenhouse gas emissions, more walkable communities (with healthier, more active people), and fewer barriers for older adults, children, and people with disabilities.

DIRECTOR'S POLICY 22: DIRECTOR'S POLICY ON CONTEXT SENSITIVE SOLUTIONS

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all State highways, was adopted by Caltrans in November of 2001. The policy reads:

The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.

The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.

The policy recognizes that "in towns and cities across California, the State highway may be the only through street or may function as a local street," that "these communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods," and that "communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality." The policy acknowledges that addressing these needs will assure that transportation solutions meet more than just traffic and operational objectives.

STRATEGIC PLAN 2020-2024

Caltrans' 2020-2024 Strategic Plan weaved sustainability principles through all of its goals. Goals of the Strategic Plan are related to safety, enhancing and connecting the multimodal transportation network, lead climate action, and advancing equity in all communities.⁹

CALIFORNIA TRANSPORTATION PLAN 2050

Caltrans completed the California Transportation Plan to comply with Title 23, Code of Federal Regulation Section 450.214 and pursuant to California Government Code Title 7 Division 1 Chapter 2.3. The California Transportation Plan provides a roadmap for making effective, equitable, transparent, and transformational transportation decisions in California. The vision of the California Transportation Plan is: "California's safe, resilient, and universally accessible transportation system supports vibrant communities, advances racial and economic justice, and improves public and environmental health," which is supported by goals related to safety, climate, equity, accessibility, public health, economy, environment, and infrastructure.¹⁰

⁹ Caltrans. 2021. Caltrans 2020-2024 Strategic Plan. https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf (accessed October 2022).

¹⁰ Caltrans. 2021. California Transportation Plan 2050. February 2021. https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf (accessed October 2022).

California Encroachment Permits

Any work within the existing right of way would have to comply with Caltrans permitting requirements. This includes a traffic control plan that adheres to the standards set forth in the California Manual of Uniform Traffic Control Devices (MUTCD). As part of these requirements, there are provisions for coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles. MUTCD requirements also provide for construction work during off-peak hours and flaggers.

Regional and Local Regulations

Plan Bay Area 2050

MTC is responsible for regional transportation planning in the nine-county San Francisco Bay Area. MTC most recently updated its Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), a federally-mandated 20-year blueprint for the region, in 2021. This RTP/SCS is known as Plan Bay Area 2050. RTPs must be developed in cooperation with State and local stakeholders and provide a clear vision of the regional transportation goals, policies, objectives, and strategies. This vision must be realistic and within fiscal constraints. Responsibility for approving and overseeing improvements to the State highway system rests with Caltrans, while each local jurisdiction (cities and County) is responsible for planning and implementing improvements to the streets within its boundaries.

The RTP/SCS sets forth the following transportation-related goals under the umbrella of Transportation Strategies. Other goals have been established for Housing Strategies, Economic Strategies, and Environmental Strategies. Each Transportation Strategies goal (listed below) has associated supportive strategies to help guide implementation, and performance indicators by which the region can assess its progress.

Goal Maintain and Optimize the Existing System

- T1. Restore, operate and maintain the existing system
- T2. Support community-led transportation enhancements in Equity Priority Communities
- T3. Enable a seamless mobility experience
- T4. Reform regional transit fare policy
- T5. Implement per-mile tolling on congested freeways with transit alternatives
- T6. Improve interchanges and address key highway bottlenecks
- T7. Advance other regional programs and local priorities

Goal Create Healthy and Safe Streets

- T8. Build a Complete Streets network
- T9. Advance regional Vision Zero policy through street design and reduced speeds

Goal Build a Next-Generation Transit Network

- T10. Enhance local transit frequency, capacity and reliability
- T11. Expand and modernize the regional rail network
- T12. Build an integrated regional express lanes and express bus network

Contra Costa County Transportation Authority Congestion Management Program

The Contra Costa Transportation Authority (CCTA) is Contra Costa County's designated Congestion Management Agency (CMA). It is responsible for implementing programs to ensure traffic levels remain manageable. Pleasant Hill serves on the Transportation Partnership and Cooperation (TRANSPAC) that includes Contra Costa County and the cities of Clayton, Concord, Martinez, Pleasant Hill, and Walnut Creek.

As the CMA, CCTA is in charge of coordinating land use, air quality, and transportation planning among local jurisdictions. A Congestion Management Program (CMP) was created to spend the funds allocated to these projects, known as Measure J. This measure is a one-half cent Countywide sales tax used for transportation improvements within the County. The revenue must be spent on projects and programs included in the CCTA Transportation Expenditure Plan. The Expenditure Plan designates 18 percent of the annual sales tax revenue as "return-to-source" funds. They City's eligibility for these funds is contingent on compliance with the City's Growth Management Program.

Contra Costa Countywide Transportation Plan

As a member of CCTA, the City of Pleasant Hill is active in the development of the Countywide Transportation Plan (CTP), intended to carry out the following Countywide transportation goals and policies relevant to the 2040 General Plan:

- Goal 1 Support the efficient, safe, and reliable movement of people and goods using all available travel modes.
 - **Policy 1.1 Efficiency.** Increase the efficiency of highways and arterial roads through capital investments, operational enhancements, and use of technology.
 - **Policy 1.2** Partnerships. Engage in partnerships with jurisdictions, stakeholders, and other agencies to identify and implement strategies for managing congestion and increasing multi-modal mobility.
 - Policy 1.4 Street and Roadway Improvements. Improve the highway and arterial system to influence the location and nature of anticipated growth in accordance with the General Plans of local jurisdictions and consistent with Contra Costa Transportation Authority adopted Countywide Transportation Plan.
- Goal 2 Manage growth to sustain Contra Costa's economy, preserve its environment and support its communities.
 - **Policy 2.1** Cooperative Planning. Continue to require cooperative transportation and land use planning among Contra Costa County, cities, towns, and transportation agencies.
- Goal 3 Expand safe, convenient, and affordable alternatives to the single-occupant vehicle.
 - **Policy 3.1** Transit Service Expansion. Help fund the expansion of existing transit services and regional express lanes, and maintenance of existing operations, including BART, bus transit, school buses, and paratransit.
 - **Policy 3.2 Transit Service Coordination.** Link transit investments to increased coordination and integration of public transit services, and improved connections between travel modes.

- **Policy 3.3 Complete Streets.** Require local jurisdictions to incorporate policies and standards for "complete streets" that support transit, bicycle and pedestrian access in new developments, infill development areas ("Priority Development Areas"), and transit priority areas.
- **Policy 3.5 Alternate Modes.** Promote the formation of more carpools and vanpools, and greater use of transit, bicycling, and walking.

Goal 4 Maintain the transportation system.

- **Policy 4.1 Stable Funding Sources.** Advocate for stable sources of funds for transit operations and other programs that support the transportation system.
- **Policy 4.2 Maintenance.** Require and fund programs for effective preventive maintenance and rehabilitation of the transportation system ("deferred maintenance").
- **Policy 4.3 Long-Term Needs.** Secure funding that will maintain the long-term health of all components of the transportation system.

The CTP incorporates five sub-regional Action Plans for Routes of Regional Significance (Action Plans). This is one of the primary vehicles for implementing achieving the Measure J Growth Management Program's goal of reducing the cumulative impacts of growth. The Action Plans also fulfill a key requirement of CCTA's Congestion Management Program. This is a State-mandated program for evaluating the impact of land use decisions on the regional transportation system and establishing performance measures. Each Action Plan contains these components:

- Long range assumptions about future land uses based on local general plans and travel demand based on household and job growth.
- Multi-modal transportation objectives that can be measured and timed.
- Specific actions to be implemented by each jurisdiction.
- A process for consultation on environmental documents.
- A procedure for reviewing the impacts of local General Plan amendments that could affect the transportation objectives.
- A schedule for reviewing and updating the Action Plans.

The City of Pleasant Hill is included in the TRANSPAC Central County Action Plan. The Action Plan includes both regional actions and actions for specific routes. There are 10 Routes of Regional Significance within Pleasant Hill:

- I-680
- SR 242
- SR 4
- Alhambra Avenue
- Contra Costa Boulevard
- Geary Road
- North Main Street (Astrid Drive to Oak Park Boulevard-Coggins Drive)
- Pacheco Boulevard (Muir Road to Second Avenue South)
- Pleasant Hill Road
- Taylor Boulevard

CCTA VMT Guidance for Member Agencies

The CCTA has developed guidance for member jurisdictions to use in developing their own VMT analysis methods, metrics, and thresholds of significance. The CCTA's *Growth Management Program Implementation Guide* (Revised February 17, 2021), Appendix F (CCTA Recommended Methodology) describes the recommendations. A flow chart describing the recommended methodology is included in the Technical Appendix (Appendix 1) to Appendix E. The City of Pleasant Hill has chosen to follow the CCTA guidance. More detail on the VMT analysis methodology, metrics, and thresholds of significance are provided in Section 3.12.4, *Impacts and Mitigation Measures*.

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to transportation and circulation, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Draft Bicycle and Pedestrian Master Plan

The City's BPMP is currently in progress and is expected to be adopted in 2023. The BPMP would provide a consistent, long-term guide to the City in developing connected networks of multipurpose paths, bikeways, sidewalks, and street crossings. The BPMP would complement the City's General Plan Circulation Element. The BPMP would identify the next phase of bicycle and pedestrian facility improvements, incorporate current policies and design standards for bicycle and pedestrian accommodation and funding strategies for future project implementation.

3.12.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Transportation.

Would the 2040 General Plan:

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

Approach to Analysis

VMT Impact Methodology and Assumptions

Since SB 743 eliminated the use of level of service (LOS) for CEQA impact analysis purposes, that method is not utilized in this analysis. The analysis in this document examines potential roadway transportation impacts under current CEQA criteria. The primary quantitative measure of roadway impacts is VMT. The VMT analysis methodology utilizes the procedures described in the CCTA's *Growth Management Program Implementation Guide* (Revised February 17, 2021), Appendix F. The procedures are summarized below.

PROJECT-LEVEL VMT SCREENING

There are five screening criteria that can be applied to screen projects out of needing to conduct a project-level VMT analysis.

- 1. **CEQA Exemption.** Any project that is exempt from CEQA is not required to conduct a VMT analysis.
- 2. **Small Projects.** Small projects can be presumed to cause a less-than-significant VMT impact. Small projects are defined as having 10,000 square feet or less of non-residential space or 20 residential units or less, or otherwise generating less than 836 VMT per day.
- 3. **Local-Serving Uses.** Projects that consist of Local-Serving Uses can generally be presumed to have a less-than-significant impact absent substantial evidence to the contrary, since these types of projects will primarily draw users and customers from a relatively small geographic area that will lead to short-distance trips and trips that are linked to other destinations.
- 4. **Projects Located in Transit Priority Areas (TPAs).** Projects located within a TPA can be presumed to have a less-than-significant impact absent substantial evidence to the contrary. This exemption would not apply if the project:
 - Has a Floor Area Ratio (FAR) of less than 0.75;
 - Includes more parking for use by residents, customers, or employees than required by the lead agency (if the agency allows but does not require the project to supply a certain amount of parking);
 - Is inconsistent with the applicable Sustainable Communities Strategy (SCS) (as determined by the lead agency, with input from the Metropolitan Transportation Commission (MTC)); or
 - Results in a net reduction in multi-family housing units.
- 5. **Projects Located in Low VMT Areas.** Residential and employment-generating projects located within a low VMT-generating area can be presumed to have a less-than-significant impact absent substantial evidence to the contrary.
 - For residential projects, a low VMT area is defined as an area with existing home-based VMT per resident that is 85 percent or less of the existing Countywide average.

As will be discussed below, the 2040 General Plan does not meet these five potential screening approaches and, thus, requires a full VMT assessment.

PROJECTS REQUIRING VMT ANALYSIS: SCENARIOS AND SIGNIFICANCE TEST

A project not excluded from VMT analysis through the screening process described above is subject to a VMT analysis to determine if it has a significant VMT impact. The analysis scenarios and significance assessment are described below.

The following scenarios are addressed in the VMT analysis. Note that, while the CCTA guidance recommends that VMT impacts be evaluated against baseline (existing) conditions, for this analysis the home-based VMT per resident and home-work VMT per employee of the 2040 General Plan is evaluated under future (2040) conditions, because the 2040 General Plan is build-out of the city under the General Plan. In addition to the comparison of the 2040 General Plan's 2040 home-based VMT per resident and home-work VMT per employee to the baseline metrics, a cumulative assessment of the project's effect on total countywide VMT rates (boundary VMT) is presented.

- Baseline (2022) Conditions: The baseline (2022) CCTA model is used to determine the baseline home-based VMT per resident and home-work VMT per employee for all traffic analysis zones (TAZs) within the city limits, as well as to determine the countywide average home-based VMT per resident and home-work VMT per employee, and the 85 percent values of these metrics.
- 2040 No Project Conditions: The Year 2040 CCTA model is adjusted to reflect build-out of the
 city under the existing General Plan, and is used to determine the 2040 No Project home-based
 VMT per resident and home-work VMT per employee for the traffic analysis zones (TAZs)
 comprising the city limits.
- 2040 Plus Project Conditions: The Year 2040 CCTA model is adjusted to reflect build-out of the
 city under the proposed General Plan Update, and is used to determine the 2040 No Project
 home-based VMT per resident and home-work VMT per employee for the traffic analysis zones
 (TAZs) comprising the city limits.
- Impact Significance Assessment: The 2040 Plus Project home-based VMT per resident and home-work VMT per employee for the city of Pleasant Hill (all TAZs) is compared to the 2022 countywide home-based VMT per resident and home-work VMT per employee. If the citywide values are higher than 85 percent of the countywide average values, the impact is significant.
- Cumulative Analysis and Significance Assessment (Project's Effect on Total Countywide VMT): The total countywide VMT per service population (defined as VMT generated by all trip types on all roadways within the county divided by all residents and employees) is compared for the 2040 Plus Project condition against the 2040 No Project condition. If the plan or project causes total Countywide VMT per service population to increase, this would constitute a significant impact.

VMT Impact Analysis Approach

MODEL STEPS

The Contra Costa Countywide Travel Demand Model (CCTA Model) was used to generate VMT estimates for the plan. The CCTA Model allows analysts to forecast regional travel behavior as a function of local land use development decisions, transportation network infrastructure planning, and land use and network policies. The CCTA Model reflects data included in Plan Bay Area 2040, the RTP/SCS that was recently replaced with adoption of Plan Bay Area 2050 by the MTC and ABAG. CCTA has prepared a memorandum documenting the CCTA Model's consistency with Plan Bay Area 2040, and the model is currently the best available tool for analysis of VMT impacts.

Residential projects are evaluated based on the home-based VMT per resident VMT metric. Home-based VMT is defined as all home-based automobile vehicle trips traced back to the residence of the trip-maker. Non-home-based trips are excluded. This VMT includes the entire length of the trip. This home-based VMT is then divided by the number of residents to calculate home-based VMT per resident.

Non-residential uses are evaluated based on the home-work VMT per employee metric. Home-work VMT is defined as the employee commute trip to and from work, and excludes mid-day trips, vendor and delivery trips, and visitor trips to the work site.

The VMT calculations are done in the CCTA Model via the production and attraction trip matrices to be able to attribute automobile vehicle trips to the residence of the trip-maker or the work site of the trip maker, respectively. The calculations include the entire trip length, including the portion that leaves the travel model area (the nine-county Bay Area). VMT for trips that leave the travel

model area is adjusted to account for the part of the trip that occurs outside of the travel model area.

LAND USE AND TRANSPORTATION ANALYSIS SCENARIOS

Table 3.12-1 shows the citywide build-out land uses under the existing (2003) General Plan and the proposed 2040 General Plan. The existing 2022 (i.e., baseline) Pleasant Hill land uses in the CCTA Model are also shown for reference. A detailed table showing more land use detail is included in Appendix E. The build-out projections represent full development of all parcels at the densities allowed under each scenario. As such, they likely represent a longer-range development scenario than is expected to occur between the baseline year (2022) and the forecast year (2040). However, the direction from City staff was to use the full build-out land use values for the 2040 VMT impact assessment. It is noted that the remainder of the 2040 CCTA Model represents 2040 land use growth consistent with the ABAG forecasts.

Table 3.12-1 City of Pleasant Hill Land Use Summary by Scenario

Scenario	Total Housing Units	Total Employees	
CCTA 2022 Baseline Model	15,511	16,883	
Existing General Plan Build-Out	30,755	39,282	
Draft General Plan Update Build-Out	35,341	40,176	
Growth: Existing General Plan Build-Out – CCTA 2022 Baseline Model	15,244	22,399	
Growth: Draft General Plan Update Build-Out – CCTA 2022 Baseline Model	19,830	23,293	
Source: CCTA Travel Demand Model (2022 data); Mintier Harnish (Build-out data); August 2022			

EIR Scoping Comments Consideration

This section also addressed comments received in response to the EIR NOP related to congestion management, CCTA and RTP consistency, multi-modal and transit improvements, and VMT/traffic analysis. Assessment of VMT, including related to travel demand reduction and multi-modal strategies, impacts is discussed under Impacts TRA-1 and TRA-2. Assessment of roadway design and safety, including for bicyclists, is addressed under Impact TRA-3.

Specific Thresholds of Significance

The City of Pleasant Hill has not adopted quantitative thresholds for the evaluation of VMT, transit facilities, bicycle and pedestrian facilities, design feature hazards, or emergency access. However, the City applies the following qualitative transportation thresholds:

VMT and Roadway Facilities

The 2040 General Plan was assessed for VMT to comply with SB 743 requirements and *CEQA Guidelines* section 15064.3, subdivision (b). The City of Pleasant Hill does not have published guidelines for VMT analysis for development projects. To determine impact findings for the 2040 General Plan the analysis is estimated based on CCTA guidance.

The following thresholds of significance are used to evaluate potential VMT impacts with implementation of the 2040 General Plan:

- Residential land uses: 15 percent below the region's average VMT per capita under baseline. For the purpose of this analysis, the applicable region is Contra Costa County.
- Office/employment land uses: 15 percent below the region's average VMT per employee under baseline conditions.

Any increase in the VMT per capita or VMT per employee with the proposed plan compared to the respective threshold (15 percent below the applicable baseline) would be considered a significant impact.

Generally, a plan/project causes a significant impact to roadway facilities if an element of it conflicts with existing or planned roadways. The evaluation of roadway facilities shall consider if:

- A plan or project or related mitigation disrupts existing roadway facilities;
- A plan or project or related mitigation conflicts with an existing roadway facility; or
- A plan or project or related mitigation conflicts with roadway policies adopted by the City of Pleasant Hill or Contra Costa County for their respective facilities.

Transit Facilities

Generally, a plan/project causes a significant impact to transit facilities and services if an element of it conflicts with existing or planned transit services. The evaluation of transit facilities shall consider if:

- A plan or project creates demand for public transit services above the capacity that is provided, or planned;
- A plan or project or related mitigation disrupts existing transit services or facilities;
- A plan or project or related mitigation conflicts with an existing or planned transit facility; or
- A plan or project or related mitigation conflicts with transit policies adopted by the City of Pleasant Hill or Contra Costa County for their respective facilities.

Bicycle and Pedestrian Facilities

The 2040 General Plan describes the related policies necessary to ensure that pedestrian and bicycle facilities are safe and effective for City residents. Using the 2040 General Plan as a guide, significant impacts to these facilities would occur when a plan or project:

- Creates a hazardous condition that currently does not exist for pedestrians and bicyclists, or otherwise interferes with pedestrian accessibility to the site and adjoining areas; or
- Conflicts with an existing or planned pedestrian or bicycle facility; or
- Conflicts with policies related to bicycle and pedestrian activity adopted by the City.

Design Feature Hazards

The impact would be significant if a plan/project resulted in transportation facilities that do not conform to applicable City and industry design standards for roadways, bicycle facilities, and pedestrian facilities.

Emergency Access

The City does not have significance thresholds related to emergency access. The City Municipal Code adopts the California Fire Code and amends the code to address local conditions. Therefore, this EIR evaluates the proposed plan using the significance threshold provided by the California Fire Code as follows:

- Multiple-family Residential Projects having more than 100 dwelling units should provide two separated and approved fire apparatus access roads.
- Development of one or two-family dwellings where the number of dwelling units exceed 30 units shall be provided with two separate and approved fire apparatus access roads.
- Provide a fire apparatus access road that has a minimum width of 20 feet with turning radii of 25 feet inside and 45 feet outside.

In addition, the following factors determine whether a plan or project has sufficient access for emergency vehicles, including:

- Location of closest fire stations
- Number of access points (both public and emergency access only)
- Width, height, and turning radius of access points
- Width, height, and turning radius of roadways

Impact Evaluation

Consistency with Circulation System Programs

Significance Criterion a: Would the proposed plan conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact TRA-1 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD NOT CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES; HOWEVER, IMPLEMENTATION COULD CONFLICT WITH A POLICY ADDRESSING ROADWAY FACILITIES. CONSTRUCTION IMPACTS WOULD NOT CONFLICT WITH THE CIRCULATION SYSTEM. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

ROADWAY, TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES

Construction activities related to implementation of the 2040 General Plan could create potential conflicts with other roadway, transit, bicycle, and pedestrian users, such as construction related activities resulting in lane, bicycle path, or sidewalk closures along the frontages of individual development projects facilitated by the proposed plan, construction vehicles queuing within the public right-of-way waiting entry to the site, construction worker parking in non-designated parking areas, or construction debris on public streets. Construction impacts would be temporary in nature and encroachment permits from Caltrans would be required for facilities under its administration, such as I-680, SR 4, SR 24, and SR 242. However, most construction would occur along local streets,

transit routes, bicycle paths, and sidewalks, but implementation of General Plan Policy TC-2.1, included below, would require a construction traffic plan to avoid construction-related impacts.

Policy TC-2.1 Traffic Plan Requirement. Require new development to establish comprehensive construction traffic plans, for approval by City staff, which denote haul routes, detours, and other factors that may impact public safety.

Therefore, with respect to conflicts with circulation system policies related to roadway, transit, bicycle, and pedestrian facilities, 2040 General Plan construction impacts would be less than significant.

Operation

ROADWAY FACILITIES

The 2040 General Plan includes modifications to existing street facilities to create a more pedestrian-oriented and bicycle-oriented street network. These modifications could cause existing and future local and regional traffic to circulate differently. The expected influence on existing and future traffic would be minimal because roadway modifications would conform to State and local standards and generally be implemented to improve circulation. Overall, the 2040 General Plan's proposed bicycle and pedestrian improvements would not conflict with existing or planned roadway facilities, because the proposed street changes are additions of pedestrian and bicycle facilities and do not specifically propose any reduction in roadway vehicle lanes.

The 2040 General Plan includes policies that would support development consistent with applicable plans, such as Plan Bay Area 2050 and Contra Costa CTP. In addition, the following 2040 General Plan policies related to roadway facilities would ensure consistency:

- **Policy LU-1.9** Connectivity Between Existing and New Development. Encourage linking new development to existing development, parks, and trails through the creation of internal circulation systems that allow travel by foot, bicycles, vehicles, and other alternative modes of travel.
- **Policy LU-5.3** Compliance with Performance Standards. Require that all new development comply with the City's performance standards for fire, police, parks, water, flood control, sanitary sewer, and transportation facilities.
- **Policy LU-6.29 Limit Driveways and Curb Cuts.** Support limiting new driveways and curb cuts and encourage consolidating existing driveways and curb cuts as Contra Costa Boulevard redevelops.
- **Policy LU-6.41 Taylor Boulevard Access.** Support limiting access points from development fronting Taylor Boulevard to enhance pedestrian, cyclist, and vehicular safety.
- **Policy LU-6.50 Circulation Enhancements.** Require upgrades to the Monument Boulevard street network to improve overall traffic flow pending approval of new development.
- **Policy TC-1.1 Rights-of-Way.** Maintain existing circulation system rights-of-way, except as necessary to address localized congestion areas.
- **Policy TC-1.2 Multimodal Travel Options.** Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.

- **Policy TC-2.1** Traffic Plan Requirement. Require new development to establish comprehensive construction traffic plans, for approval by City staff, which denote haul routes, detours, and other factors that may impact public safety.
- **Policy TC-2.3 LOS Standards and Conditions of Approval.** Approve new development which at least meets or is mitigated to meet adopted LOS standards as documented in the City Findings of Consistency.
- **Policy TC-2.4 Traffic Impact Study.** Require traffic impact studies (including VMT and LOS analysis) as part of the application review process for development projects.
- Policy TC-2.5 Transportation Demand Management (TDM). Require robust transportation demand management with all new private development that requires establishment of incentives and programs to reduce traffic congestion including annual reporting to ensure transportation demand management goals for a project are being met and to correct transportation demand management practices.
- **Policy TC-3.1 Residential Streets.** Prioritize traffic calming improvements and enforcement efforts along residential roadways that have recurring cut-through traffic or excessive speeding.
- **Policy TC-3.2** Arterial and Collector Streets. Minimize opportunities for regionally generated cut-through vehicle travel in the city as part of new roadway projects or projects within public roadways.
- **Policy TC-3.3 Vehicle Traffic Calming Devices.** Consider traffic calming devices such as lane narrowing, widening medians, neighborhood traffic circles, roundabouts, and landscaping to discourage cut-through vehicle traffic.
- **Policy TC-3.4** Alternative Methods to Prevent Cut-Through Vehicle Traffic. Consider the use of alternative street surfacing materials, traffic diverters, special designs, and stop signs to prevent cut-through traffic on residential streets.
- **Policy TC-3.5 Monument Triangle Congestion.** Support the reconfiguration of the Monument Triangle circulation network and to improve vehicle, pedestrian, and bicycle safety while reducing congestion anticipated from future development.
- **Policy TC-3.6** School Area Congestion. Work with the Mount Diablo Unified School District, private schools, and Diablo Valley College to address traffic speeds and congestion near schools and on key access routes.
- **Policy TC-4.5 Correlation Between Land Use and Transportation.** Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.
- **Policy TC-7.1** Multi-Jurisdictional Transportation Planning. Participate in multi-jurisdictional transportation planning through TRANSPAC and CCTA activities to ensure all City planning efforts, projects, and developments comply with regional requirements and standards.

- **Policy TC-8.5 Reduce Vehicle Speeds.** Support the reduction of vehicle speeds using engineering and design techniques, community education, and evaluation and planning strategies rather than relying solely on enforcement.
- Policy TC-8.8 New Development Neighborhood Traffic Impacts. Require developer participation in the cost of installation of traffic calming measures to reduce neighborhood traffic impacts through fee payments or direct contribution as a condition of approval, if applicable.
- Policy TC-8.11 Traffic Safety Corridors. Identify Traffic Safety Corridors along Suggested Routes to School and protected residential neighborhoods as allowed through California Assembly Bill 43 Traffic Safety to establish lower speed streets to improve bicycle and pedestrian safety.
- **Policy TC-14.1 Minimize Truck Conflicts.** Minimize potential conflicts between trucks and pedestrian, bicycle, and transit travel on streets designated as truck routes.
- **Policy TC-14.2 Minimize Truck Loading and Unloading Conflicts.** Minimize potential conflicts between truck loading and unloading and pedestrian, bicycle, and transit travel.
- **Policy TC-14.4** Truck Route Network. Develop a signage program that identifies truck routes.

Implementation of the above 2040 General Plan policies would ensure consistency with circulation system policies related to roadway facilities.

Buildout of the 2040 General Plan land use plan would lead to an approximately 100 percent increase in residential units and a 50 percent increase in non-residential uses, which in turn would increase the vehicle travel demand on the Pleasant Hill roadway network. Increased vehicle travel demand may result in increased congestion, because no roadway widenings are proposed as part of the 2040 General Plan. The travel demand forecasting performed for the 2040 General Plan indicates that certain segments of the following roadways would exceed the daily vehicle capacities, as defined in the Contra Costa Countywide Travel Demand Model:

- Contra Cost Boulevard, Beth Drive to Sunvalley Boulevard
- Ellinwood Drive. East of Contra Costa Boulevard
- Buskirk Avenue, Monument Boulevard to Hookston Road
- Oak Park Boulevard, Hook Avenue to Putnam Boulevard

It is important to note that the forecasting encompasses full build-out of all parcels to their maximum capacity, and represents growth over a much longer period than the 18 years represented in the travel demand model (2022 to 2040). Therefore, these over-capacity conditions may not materialize by 2040.

Growth associated with implementation of the 2040 General Plan could interfere with the operation of existing roadway facilities or conflict with planned roadway facilities; however, implementation of the aforementioned roadway facility policies would minimize such potential conflicts. Therefore, with respect to conflicts with circulation system policies related to roadway facilities, operational impacts of the 2040 General Plan would be less than significant.

TRANSIT FACILITIES

Development under the 2040 General Plan would not obstruct existing transit services or facilities, nor would it conflict with existing or planned facilities. All new development would be subject to City discretionary review, allowing the City to ensure that project designs would not interfere with transit operations. Buildout of the 2040 General Plan would increase the number of potential transit users on the various transit systems serving the city. Increased users would result in a correlated increase in demand for transit. Additionally, roadway traffic congestion caused from population and employment growth in the city facilitated by the 2040 General Plan could affect transit corridors by increasing travel times and decreasing headway reliability for transit vehicles.

The 2040 General Plan includes policies that would support development consistent with applicable plans, like Plan Bay Area 2050 and Contra Costa CTP. 2040 General Plan contains the following goals and policies that would support reducing traffic congestion and improving transit connectivity:

- **Policy LU-1.9** Connectivity Between Existing and New Development. Encourage linking new development to existing development, parks, and trails through the creation of internal circulation systems that allow travel by foot, bicycles, vehicles, and other alternative modes of travel.
- **Policy LU-5.3** Compliance with Performance Standards. Require that all new development comply with the City's performance standards for fire, police, parks, water, flood control, sanitary sewer, and transportation facilities.
- **Policy LU-6.25** Transit-Oriented Development. Encourage the design and development of transit-oriented developments along Contra Costa Boulevard to support future transportation system enhancements.
- Goal TC-1 Establish and maintain a safe and efficient circulation system that emphasizes the use of existing arterial and collector roadways, paths, and bike lanes.
 - **Policy TC-1.2 Multi-Modal Travel Options.** Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.
 - **Policy TC-1.3** Community Input on Complete Streets. When planning and designing for complete streets, receive input from groups and individuals representing the various types of users of City streets.
 - **Policy TC-1.4** Community Input on Roadway Improvements. Support the sponsoring of forums to obtain citizen input to develop roadway improvements aimed at improving traffic circulation, reduce traffic speeding, and maximizing person throughput.
- Goal TC-4 Reduce congestion and vehicle trips through land use planning.
 - **Policy TC-4.1 Transportation Mode Mix.** Plan for appropriate mix of transportation modes and the infrastructure to support these modes to meet community needs.
 - **Policy TC-4.2 Develop Thoroughfares.** Develop and improve thoroughfares based on existing and proposed land use patterns and projected demand.
 - **Policy TC-4.4 Infill Development.** Support infill and development in existing urban areas and around key transit facilities.

- **Policy TC-4.5** Correlation Between Land Use and Transportation. Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.
- Goal TC-5 Support a vibrant, walkable environment that encourages alternative (non-driving modes of transportation.
 - Policy TC-5.1 Evaluate Multi-Modal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).
- Goal TC-8 Encourage the development of a comprehensive and integrated transportation network with infrastructure and design features that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, youth, and families.
 - **Policy TC-8.1** Complete Streets Principles. Apply complete streets principles when building new, or rehabilitating existing, roadways, consider the following design elements:
 - Sidewalks and curbs as a standard design principle.
 - Bicycle lanes and/or shared lanes as a standard design principle.
 - Transit accessibility as a standard design principle.
 - Shade trees and planting strips as a standard design principle along roadways
 - **Policy TC-8.2 Review for Complete Streets.** Review street reconstruction, new development, and utility projects to incorporate complete street elements when feasible, including trails, bus stop enhancements, and bicycle/pedestrian facilities.
- Goal TC-13 Reduce congestion and vehicle trips through non-automobile transportation.
 - **Policy TC-13.1 Bus and Rail Services.** Coordinate with local transit providers (i.e., bus, paratransit, and rail service) to provide expanded schedules and services that meet the needs of Pleasant Hill residents.
 - Policy TC-13.2 Innovative Transportation Technologies. Work with transit providers, employers, schools, and developers to encourage innovative technologies that promote more effective and expanded use of transit and facilitate other innovations to serve first and last mile travel, such as mobility hubs and micromobility (e-scooters, e-bikes).
 - **Policy TC-13.3** Support County Connection Improvements. Support County Connection to improve all types of accessibility and comfort for their facilities and to incorporate intermodal facilities where feasible.

- **Policy TC-13.4** Transit for Commuters and Special Needs Populations. Work with transit providers and other regional TDM entities to promote and incentivize use of transit for commuters, seniors, students, and persons with disabilities.
- **Policy TC-13.5 Senior Van Service.** Maintain the City's Senior Van Service for residents over the age of 55, subject to the availability of funding.

2040 General Plan goals and policies listed above encourage an increase in transit ridership, decreased dependence on motor vehicles, and reduce transit delays. While the proposed plan could add peak hour transit riders, implementation of the proposed plan would not disrupt existing or interfere with planned transit services or facilities.

The CCTA CTP contains goals and policies, as listed under Section 3.12.3, *Regulatory Framework*, to manage the County's transportation system, including several policies relating to the preservation and enhancement of transit service, in partnership with local jurisdictions, as the County grows. These goals and policies are consistent with the 2040 General Plan goals and policies and would result in coordinated planning for the expansion of transit service to meet demand as the City of Pleasant Hill grows under the 2040 General Plan.

Implementation of the above 2040 General Plan policies would ensure consistency with circulation system policies related to transit facilities. Therefore, with respect to conflicts with circulation system policies related to transit facilities, operational impacts of the 2040 General Plan would be less than significant.

BICYCLE FACILITIES

Growth in residential and non-residential uses under the 2040 General Plan could result in more bicycle use on existing facilities. The 2040 General Plan includes complete streets policies, new bicycle facilities, and transportation and circulation goals and policies to accommodate increased bicycle demands generated by new development. This network would accommodate bicycle demand generated by the land development. Examples of goals and policies consistent with applicable plans, like Plan Bay Area 2050 and Contra Costa CTP, in the 2040 General Plan that would encourage bicycle transportation modes while also ensuring bicycle facilities are adequate include those listed under the *Transit Facilities* impact discussion above, and the following:

- **Policy LU-3.3 Neighborhood Access.** Ensure that new residential development include safe and convenient pedestrian and bicycle access to existing residential neighborhoods.
- **Policy LU-7.3** Remove Physical Barriers. Remove or plan for ways to address physical barriers that bisect neighborhoods and discourage walking or biking.
- Goal TC-11 Increase the number of bicycle and pedestrian trips by users of all ages and abilities.
 - **Policy TC-11.1 Bicycle and Pedestrian Network.** Support a network of safe and comfortable bikeway and pedestrian facilities connecting neighborhoods and destinations in Pleasant Hill and adjacent jurisdictions.
 - **Policy TC-11.2 Street Design.** Require street cross-sections to accommodate bicyclists, micromobility users, and pedestrians.

- **Policy TC-11.3 Protected Bicycle Facilities.** Consider incorporating protected bicycle and pedestrian facilities in higher density land use areas and along major transportation corridors to the greatest extent feasible.
- Goal TC-12 Strive to eliminate all fatal and serious injury bicycle and pedestrian related crashes.
 - **Policy TC-12.1** Collision Database. Create a traffic count data and collision database and work with applicable City departments and law enforcement to map collision data for identifying problem areas.
 - **Policy TC-12.2 Design Standards.** Support design upgrades to bicycle and pedestrian facilities to increase connectivity and safety citywide.
 - **Policy TC-12.3 Bicycle and Pedestrian Education.** Support bicycle and pedestrian safety education in all Pleasant Hill schools. Continue to support Safe Routes to Schools programs to address pedestrian and bicycle safety.
 - **Policy TC-12.4 Safe Routes to School (SR2S).** Support Safe Routes to School infrastructure and education & encouragement programs to address and enhance pedestrian and bicycle safety. Develop Suggested Route to School maps for Pleasant Hill schools to help prioritize infrastructure improvements along routes supporting student commutes.
 - **Policy TC-12.5** Technology Safety Enhancements. Identify and deploy technology solutions to support bicycle and pedestrian safety through the City including passive detection systems at traffic signals and trail crossings.
 - **Policy TC-12.6 Bike Route Connectivity.** Develop and sign a network of bicycle routes that provide connectivity between homes, job centers, schools and other frequently visited destinations.
 - **Policy TC-12.7 Emphasis on Walking and Biking.** Encourage more people to walk and bicycle for a variety of purposes.
 - **Policy TC-12.8 Bicycle Parking.** Support the expansion of the bicycle parking network in Pleasant Hill.
 - **Policy TC-12.9 Supportive Infrastructure.** Encourage the implementation of supportive infrastructure and programs.
 - **Policy TC-12.10 Safe Intersections for Bicycles.** Ensure adequate crossing times and detection for bicycle users at signalized intersections.
 - **Policy TC-12.11 Commute Information.** Promote 511 Contra Costa alternative commute mode materials to encourage reduced reliance on vehicular use.
 - Policy TC-12.12 Bike to Work Day. Promote and support a Bike to Work Day.
 - Policy TC-12.13 Speed Limit Modifications. Using future accommodations provided through AB 43 Traffic Safety, re-survey speed limits in the City to identify speed limit reduction opportunities that focus on traffic safety for vulnerable roadway users.

The 2040 General Plan would encourage bicycling by improving bicycle connectivity with a comprehensive community-wide network of on-street and off-street bicycle facilities, which would be defined in the City of Pleasant Hill Draft BPMP. Implementation of the 2040 General Plan would not interfere with existing bicycle facilities or conflict with planned bicycle facilities or adopted bicycle system plans, guidelines, policies, or standards. Furthermore, implementation of the 2040 General Plan would create new bicycle facilities consistent with the City of Pleasant Hill Draft BPMP, which would have a beneficial effect on bicycle circulation and access. Therefore, with respect to conflicts with circulation system policies related to bicycle facilities, operational impacts of the 2040 General Plan would be less than significant.

PEDESTRIAN FACILITIES

Growth in residential and non-residential uses under the 2040 General Plan could result in more use and demand on existing pedestrian facilities. The 2040 General Plan includes complete streets policies, new pedestrian facilities, and transportation and circulation goals and policies to accommodate increased pedestrian demands generated by the development envisioned in the 2040 General Plan. The 2040 General Plan would encourage walking by improving pedestrian facilities and connectivity with a safe and continuous pedestrian network to shorten walking distances and improve pedestrian connections to popular local destinations. Examples of goals and policies in the 2040 General Plan that would encourage walking trips and ensure pedestrian facilities are adequate include the following, and those listed under *Transit Facilities* and *Bicycle Facilities* above:

- **Policy LU-1.7 Multi-Story Development.** Require multi-story buildings to incorporate step backs on upper floors to create a more human-scale and comfortable pedestrian environment.
- **Policy LU-3.2 Connectivity.** Encourage new residential and mixed-use development to incorporate design features that promote walking within neighborhoods and citywide.
- **Policy LU-4.2 Strip Commercial Conversion.** Encourage existing strip commercial uses to be redeveloped into pedestrian friendly, contemporary shopping environments.
- **Policy LU-6.16 Walkable Environment.** Enhance the pedestrian connections between Downtown, Crescent Drive, City Hall, and adjacent commercial centers along Contra Costa Boulevard.
- **Policy LU-6.27** Pedestrian Oriented Development. Support the transformation of existing auto-oriented and strip commercial uses into attractive pedestrian-oriented developments that enhance the visual character and interest of the boulevard.
- **Policy LU-6.37 Pedestrian Friendly Design.** Encourage the expansion of Gregory Lane pedestrian and bicyclist infrastructure to create a more multi-modal friendly environment that increases overall safety.
- **Policy LU-6.48 Pedestrian Connectivity.** Require Monument Boulevard pedestrian upgrades including signalized crossings, bulb outs, and expanded sidewalks.

Goal TC-9 Prioritize a safe and connected pedestrian network for users of all ages and abilities.

- **Policy TC-9.1** Pedestrian Safety. Maintain and upgrade the City's pedestrian system by installing or upgrading sidewalks, warning devices, crosswalks, and other pedestrian aids where appropriate, including particular consideration for the needs of users of all ages and abilities.
- **Policy TC-9.2** Pedestrian Connections. Require new development to use best practices in providing pedestrian connections between sites and existing and planned pedestrian facilities, including those identified in the Bicycle and Pedestrian Master Plan and other relevant plans and documents.
- **Policy TC-9.3 Enhance Pedestrian Crossings.** Enhance pedestrian crossings on all arterial and collector roadways.
- **Policy TC-9.4 Sidewalk Maintenance.** Maintain existing sidewalk to meet ADA requirements, including removal or relocation of objects obstructing pedestrian path and installation of wider or detached sidewalks with a buffer separation from vehicular traffic, where feasible.
- **Policy TC-9.5 Sidewalk Guidelines and Standards.** Establish sidewalk standards and guidelines for enhancing existing sidewalk and installation of new sidewalks.
- Policy TC-9.6 Planning for Pedestrian Improvements. Ensure all planning processes, such as PUD Concept Plans, master plans and specific plans, identify areas where pedestrian improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting, and new street furniture.
- **Policy TC-9.7 Enhance Street Lighting.** Enhance street lighting to provide for better pedestrian safety.
- **Policy TC-9.8 Sidewalk Improvements.** Improve sidewalks to facilitate access by users of all ages and abilities.
- **Policy TC-9.9 Sidewalk Gap Closure Plan.** Create a sidewalk gap closure plan that identifies high-priority sidewalk throughout the city and establishes an implementation plan for eliminating the gaps.

Goal TC-10 Provide well-designed and well-maintained off-street paths and trails.

- **Policy TC-10.1 Prioritize Linkages.** Design and maintain a pedestrian system that provides connections between trails and access to roadways and parking.
- Policy TC-10.2 Safe and Interconnected Trails. Work with other responsible/owner agencies to ensure the trails system is designed to be safe and interconnected, incorporating on-street connections where needed, designed for pedestrians and/or bicyclists, and consistent with other relevant plans.
- **Policy TC-10.3 Safe Trail Crossings.** Provide safe trail crossings at surface streets for all non-motorized users. This requires the installation of signs, striping, pavement markings, and actuated traffic control devices, where applicable.

Policy TC-10.4 New Trails. Coordinate with East Bay Municipal Utility District and other agencies to explore new trail opportunities to provide connections to parts of the city without off-road bicycle and pedestrian connections.

Implementation of the above 2040 General Plan policies would ensure consistency with circulation system policies related to pedestrian facilities. Therefore, with respect to conflicts with circulation system policies related to pedestrian facilities, operational impacts of the 2040 General Plan would be less than significant.

Mitigation Measure

No mitigation is required.

Level of Significance

Less than significant without mitigation

Vehicle Miles of Travel

Significance Criterion b: Would the proposed plan conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)?

Impact TRA-2 Implementation of the 2040 General Plan would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (B). IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE EVEN WITH MITIGATION.

Construction

Impacts related to *CEQA Guidelines* Section 15064.3, subdivision (b) are limited to operational impacts. No respective construction impacts would occur because construction is temporary in nature and, while it may marginally generate VMT from construction worker trips or road detours, does not substantially impact regional VMT.

Operation

The Contra Costa Countywide Travel Demand Model was adjusted to reflect the relevant land use growth for with and without 2040 General Plan implementation, as described under *Approach to Analysis*. Table 3.12-2 presents the VMT results for the home-based VMT¹¹ per resident. Table 3.12-3 presents the results for the home-work VMT¹² per employee.

¹¹ Home-based VMT is VMT generated by trips to and from the home, made by residents, deliveries, etc., and excludes trips made by residents between non-home locations (such as trips between their workplace and other destinations during the day).

¹² Home-work VMT is VMT generated by employee trips between the home and the workplace, and excludes other workplace trips such as visitors, vendors, and deliveries.

Table 3.12-2 Citywide Home-Based VMT Summary

Scenario	Home-Based VMT	Residents	Home-Based VMT Per Resident	County Average Home- Based VMT per Resident
2022 Baseline	441,405	34,193	12.9	17.2
Threshold1				14.6
2040 With Existing General Plan Build-Out	646,563	58,629	11.0	15.9
2040 With General Plan Update Build-Out	739,984	70,397	10.5	15.9
Does Project meet Threshold?			Yes	

^{1.} 85 percent of 2022 Baseline Countywide Average

Source: CCTA Travel Demand Model; Fehr & Peers, October 2022.

Table 3.12-3 Citywide Home-Work VMT Summary

Scenario	Home-Work VMT	Employees	Home-Work VMT per Employee	County Average Home-Work VMT per Employee
2022 Baseline	324,168	22,742	14.3	15.0
Threshold ¹				12.7
2040 With Existing General Plan Build-Out	506,612	36,127	14.0	15.1
2040 With General Plan Update Build-Out	519,951	37,069	14.0	15.0
Does Project meet Threshold?			No	

¹ 85 percent of 2022 Baseline Countywide Average

Source: CCTA Travel Demand Model; Fehr & Peers, October 2022.

The analysis indicates that the Pleasant Hill VMT per resident of 12.9 miles-per-resident is substantially lower than the Countywide average VMT per resident of 17.2 miles-per-resident in the 2022 baseline and is projected to be substantially lower than the Countywide average VMT per resident in 2040 for both the existing (2003) General Plan and proposed 2040 General Plan buildout scenarios. Further, the Pleasant Hill Home-Work VMT per employee of 14.3 miles-per-resident is slightly lower than the Countywide average Home-Work VMT per employee of 15.0 miles-per-resident in the 2022 baseline and is projected to be slightly lower than the Countywide average VMT per resident in 2040 for both the existing General Plan and 2040 General Plan buildout scenarios.

Home-Based VMT rates in the County as a whole, and in Pleasant Hill, are projected to decline between 2022 and 2040. Home-Work VMT rates in the County and in Pleasant Hill are projected to stay relatively similar between 2022 and 2040. The Home-Based VMT rates in Pleasant Hill are projected to be less than 85 percent of the baseline Countywide average for both the existing General Plan and 2040 General Plan buildout scenarios. However, the Home-Work VMT rates in Pleasant Hill are projected to be higher than 85 percent of the baseline Countywide average for both the existing General Plan and 2040 General Plan Update Build-out scenarios. The 2040 General Plan Update buildout scenario projects lower Home-Based VMT rates than if the existing General Plan were built out, but the two scenarios have similar Home-Work VMT rate projections.

Development facilitated by the 2040 General Plan would result in reductions in VMT per capita and VMT per employee from existing conditions, but VMT per employee would still exceed the impact threshold. Implementing the 2040 General Plan policies listed above under Impact TRA-1 would reduce VMT through promoting accessibility, encouraging non-vehicle transportation modes, and improving access to transit services. Even with the 2040 General Plan policies to reduce VMT, it is

possible that VMT per employee would still remain above applicable thresholds. Although VMT per capita and employee would be reduced as a result of the 2040 General Plan, which would a beneficial effect, according to OPR guidance on the application of SB 743, a VMT impact is still significant if VMT per capita or employee remains above 15 percent below the existing baseline. Thus, with respect to consistency with *CEQA Guidelines* Section 15064.3, subdivision (b), the operational VMT impact of the 2040 General Plan would be significant and unavoidable since VMT per employee would be greater than 12.7 in the 2040 General Plan area, and Mitigation Measure TRA-1 would be required.

Available project characteristics modification and TDM measures are included under Mitigation Measure TRA-1. CCTA also includes participation in a CCTA-approved VMT impact fee program and/or VMT mitigation exchange/banking program, but CCTA is still developing such a program. City of Pleasant Hill requirement to participate in this program is also included under Mitigation Measure TRA-1.

Due to unknown future conditions at the time of future projects facilitated by the 2040 General Plan and the uncertainty of the effectiveness of VMT reduction measures under Mitigation Measure TRA-1 to guarantee a reduction of VMT below thresholds, operational VMT impacts of the 2040 General Plan would remain significant and unavoidable even with mitigation.

Mitigation Measure

MITIGATION MEASURE TRA-1 PREPARE AND IMPLEMENT A TDM PLAN WITH TDM PROGRAMS

The CCTA's *Growth Management Program Implementation Guide* (Revised February 17, 2021), Appendix F (CCTA Recommended Methodology) describes options for mitigation of VMT impacts. The first two options below apply to development project and plans, and the third applies at a Citywide scale.

- 1. The project applicant shall modify the project's characteristics to reduce VMT generated by the project prior to issuance of an occupancy permit. This might involve changing the density or mixture of land uses on the project site, or changing the project's location to one that is more accessible by transit or other travel modes.
- The project applicant shall implement transportation demand management (TDM) or physical design measures to reduce VMT generated by the project prior to issuance of an occupancy permit.
- 3. The City shall participate in a CCTA-approved VMT impact fee program and/or VMT mitigation exchange/banking program, when it is completed and published by CCTA. (Note that CCTA is developing such a program for Contra Costa County.)

The City shall require preparation and implementation of project-level TDM Plans with the following TDM measures for future land use development projects facilitated by the 2040 General Plan that do not meet CCTA screening criteria and thresholds.

Table 3.12-4 TDM Measures

CAPCOA Handbook Measure	Types of Projects	Core Elements
T-7: Commute Trip Reduction Marketing	Employment-based	*Thoughtful marketing strategy *Readily available commute information *Designated TDM Coordinator *Guaranteed Ride Home
T-8: Provide Ridesharing Program	Employment-based	*Participation in a TMA with ride-matching program *Preferential parking policies for carpools *Promotions and incentives such as gas cards at carpool formation
T-9: Implement Subsidized or Discounted Transit Program	Residential, School, Employment-based	*Location within 1/2 mile of major transit stop or high-quality transit corridor *Participation in Commuter Benefits Program *Easy to sign up for incentives
T-11: Provide Employer Sponsored Vanpool / Point-to-Point Shuttles	Employment-based	*Coordinate logistics of vanpool program *Cover vanpool fares for riders through commute benefits program *Promote and facilitate vanpool creation
T-12: Price Workplace Parking	Employment-based	*Location within 1/2 mile of transit service *Priced at least \$5 per day *On-street parking nearby is not readily available
T-13: Implement Employee Parking Cashout	Employment-based	*Parking is provided as benefit *On-street parking nearby is not readily available *Participants pledge to not drive to work
T-16: Unbundle Residential Parking Costs	Residential	*On-street parking nearby is not readily available *All parking is priced at a rate at least \$30 per month
T-23: Community-Based Travel Planning	Residential, Retail, School	*Proactive outreach to all households in service area or project *Program Coordinator designated as lead in promoting non-auto transportation
T-10: Provide End-of-Trip Bicycle Facilities	All Projects	*Provision of secure bicycle parking in the form of lockers, a locked storage room, or an attended storage facility *(For non-residential): Provision of lockers, showers and changing rooms
T-21A: Implement Carshare Program / Provide Carshare Parking	All Projects	*Dedicate parking for carshare vehicles *Identify carshare partner
T-15 Reduce Parking Supply	Residential	*On-street parking nearby is not readily available
T-18: Provide Pedestrian Network Improvements:	All Projects	Completion of one or more projects identified in the Solano County Active Transportation Plan
T-19-A and T-19-B: Construct or Improve Bicycle Facility/Bicycle Boulevard	All Projects	_
T-20: Expand Bikeway Network	All Projects	
T-26 Increase Transit Frequency	All Projects in PDAs	Increase the frequency of transit service by providing funding for more operators and vehicles
T-25 Increase Transit Coverage	All Projects	Expand transit service to areas without access to it, or expand to later/earlier hours.

CAPCOA Handbook Measure	Types of Projects	Core Elements
T-23: Community-Based Travel Planning	Residential, Retail, School	*Proactive outreach to all households in service area or project
		*Program Coordinator designated as lead in promoting non-auto transportation
T-22: Bikeshare/Scootershare	All Projects in PDAs	Fund and implement program providing e-bikes o scooters available on demand. Ideally pursue a "dockless" system.
Free E-Bike Program	All Projects	Provide e-bikes free of charge to households pledging to reduce vehicle trips

Source: Handbook for Analyzing Greenhouse Gas Emissions Reductions, Assessing Climate Change Vulnerabilities, and Advancing Health and Equity (CAPCOA, December 2021).

Feasible options listed under Table 3.12-4 to reduce VMT below CCTA thresholds shall be implemented for individual projects facilitated by the 2040 General Plan. VMT reduction measures shall be included at project design review and be reviewed and approved by the City prior to issuance of construction permits.

Level of Significance

Significant and unavoidable

Roadway Design Safety Hazards

Significance Criterion c:	Would the proposed plan substantially increase hazards due to a
	geometric design feature (e.g., sharp curves or dangerous intersections) or
	incompatible use (e.g., farm equipment)?

Impact TRA-3 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD NOT SUBSTANTIALLY INCREASE HAZARDS BECAUSE OF A GEOMETRIC DESIGN FEATURE (E.G., SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT). IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction of the proposed plan is anticipated to utilize vacant areas within the plan areas to accommodate storage of large construction vehicles. Such staging areas would reduce the amount of heavy construction vehicles using adjacent roads. During construction, truck deliveries would be expected to use collectors and would avoid adding additional heavy duty truck traffic on feeder streets and local streets. Furthermore, these truck routes are specifically designated to avoid impacts to pedestrian and bicyclists. Thus, because the construction trucks would travel along the designated truck routes, there would not be a conflict with the automobile vehicle, transit, bicycle, and pedestrian design and activity along roadways on and near the plan area. Therefore, construction impacts related to roadway design safety hazards would be less than significant.

Operation

Development facilitated by the 2040 General Plan would increase the number of users on the Pleasant Hill transportation system, which could increase transportation circulation design safety hazards associated with future projects in the General Plan area. Primary operational vehicular

access to and through the General Plan area would be provided by existing signalized intersections and highways.

Improvements to the transportation and circulation system in the City would be implemented over time through buildout year of 2040. Pleasant Hill maintains improvement standards that guide the construction of new transportation facilities to minimize design hazards for all users of the system. Through the environmental review process, land use proposals that would add traffic to streets not designed to current standards are evaluated. If needed, mitigation measures are identified therein, and the project is conditioned to construct or provide funding for an improvement that would minimize or eliminate the hazard. Typical improvements Include shoulder widening, adding turn pockets, adding sidewalks or crosswalks, realigning sharp curves, prohibiting certain turning movements, signalizing intersections, and increasing sight distance, among other measures. New and upgraded roadways needed to accommodate new development would be designed according to applicable Federal, State, and local design standards. Development and infrastructure projects in Pleasant Hill would be required to comply with the General Plan Update, Pleasant Hill Municipal Code, and applicable State and local regulations. As a result, and in consideration of the 2040 General Plan's policies regarding infrastructure safety, listed below, this impact would be less than significant. The 2040 General Plan establishes the following goals and policies that are intended to result in roadway designs that safely accommodate all users:

- Goal TC-1 Establish and maintain a safe and efficient circulation system that emphasizes the use of existing arterial and collector roadways, paths, and bike lanes.
 - **Policy TC-1.2** Multi-Modal Travel Options. Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.
- Goal TC-2 Improve traffic circulation along the city roadway network.
 - **Policy TC-2.1 Traffic Plan Requirement.** Require new development to establish comprehensive construction traffic plans, for approval by City staff, which denote haul routes, detours, and other factors that may impact public safety.
 - **Policy TC-2.6** Safe Routes to School (SR2S). Establish a Safe Routes to School program in collaboration with the school districts and private schools that identifies and promotes suggested routes to school and incentivizes students and parents to use alternative transportation modes for school commutes.
- Goal TC-3 Encourage slower vehicle speeds and discourage cut-through traffic along City roadways, especially within residential neighborhoods and along freeway bypass routes.
 - **Policy TC-3.1 Residential Streets.** Prioritize traffic calming improvements and enforcement efforts along residential roadways that have recurring cut-through traffic or excessive speeding.
 - **Policy TC-3.2** Arterial and Collector Streets. Minimize opportunities for regionally generated cut-through vehicle travel in the city as part of new roadway projects or projects within public roadways.

- **Policy TC-3.3 Vehicle Traffic Calming Devices.** Consider traffic calming devices such as lane narrowing, widening medians, neighborhood traffic circles, roundabouts, and landscaping to discourage cut-through vehicle traffic.
- **Policy TC-3.4** Alternative Methods to Prevent Cut-Through Vehicle Traffic. Consider the use of alternative street surfacing materials, traffic diverters, special designs, and stop signs to prevent cut-through traffic on residential streets.
- **Policy TC-3.5 Monument Triangle Congestion.** Support the reconfiguration of the Monument Triangle circulation network and to improve vehicle, pedestrian, and bicycle safety while reducing congestion anticipated from future development.
- **Policy TC-3.6 School Area Congestion.** Work with the Mount Diablo Unified School District, private schools, and Diablo Valley College to address traffic speeds and congestion near schools and on key access routes.
- Goal TC-5 Support a vibrant, walkable environment that encourages alternative (non-driving) modes of transportation.
 - Policy TC-5.1 Evaluate Multi-modal Facility Needs. Evaluate the needs of transit, bicycle, and pedestrian facilities and/or access for new development as part of the review process, and require new development to incorporate transit, bicycle, and pedestrian access where feasible and appropriate, consistent with the Circulation Element and the Bicycle and Pedestrian Master Plan (when adopted).
 - **Policy TC-5.3. Mobility Technology Support.** Identify and implement technology that supports walking, biking, commuting, and other alternative transportation modes within the City including infrastructure that supports micro mobility use within the City.
- Goal TC-8 Encourage the development of a comprehensive and integrated transportation network with infrastructure and design features that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, youth, and families.
 - **Policy TC-8.1** Complete Streets Principles. Apply complete streets principles when building new, or rehabilitating existing, roadways, consider the following design elements:
 - Sidewalks and curbs as a standard design principle.
 - Bicycle lanes and/or shared lanes as a standard design principle.
 - Transit accessibility as a standard design principle.
 - Shade trees and planting strips as a standard design principle along roadways.
 - **Policy TC-8.2 Review for Complete Streets.** Review street reconstruction, new development, and utility projects to incorporate complete street elements when feasible, including trails, bus stop enhancements, and bicycle/pedestrian facilities.

- **Policy TC-8.3** Regional Complete Streets Planning. Coordinate internally and with other agencies to plan for the provision of complete streets regionally.
- **Policy TC-8.4 Multi-Modal Roadways.** Consider the needs of vehicles, bicycle, and pedestrians on all city roadways and facilities.
- **Policy TC-8.5 Reduce Vehicle Speeds.** Support the reduction of vehicle speeds using engineering and design techniques, community education, and evaluation and planning strategies rather than relying solely on enforcement.
- **Policy TC-8.6 Wide Sidewalks for Shared Use.** Provide wide sidewalks to allow shared use by pedestrians, bicyclists, and non-motorized modes of transportation as directed by the City Engineer.
- **Policy TC-8.7 Limit Roadway Widening.** Limit roadway widening and prioritize bicycle and pedestrian facility improvements within the right of way to increase roadway capacity that does not conflict with emergency access requirements.
- Policy TC-8.11 Traffic Safety Corridors. Identify Traffic Safety Corridors along Suggested Routes to School and protected residential neighborhoods as allowed through California Assembly Bill 43 Traffic Safety to establish lower speed streets to improve bicycle and pedestrian safety.

Goal TC-9 Prioritize a safe and connected pedestrian network for users of all ages and abilities

- **Policy TC-9.1** Pedestrian Safety. Maintain and upgrade the City's pedestrian system by installing or upgrading sidewalks, warning devices, crosswalks, and other pedestrian aids where appropriate, including particular consideration for the needs of users of all ages and abilities.
- **Policy TC-9.3 Enhance Pedestrian Crossings.** Enhance pedestrian crossings on all arterial and collector roadways.
- **Policy TC-9.4 Sidewalk Maintenance.** Maintain existing sidewalk to meet ADA requirements, including removal or relocation of objects obstructing pedestrian path and installation of wider or detached sidewalks with a buffer separation from vehicular traffic, where feasible.
- **Policy TC-9.5 Sidewalk Guidelines and Standards.** Establish sidewalk standards and guidelines for enhancing existing sidewalk and installation of new sidewalks.
- Policy TC-9.6 Planning for Pedestrian Improvements. Ensure all planning processes, such as PUD Concept Plans, master plans and specific plans, identify areas where pedestrian improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting, and new street furniture.
- **Policy TC-9.7 Enhance Street Lighting.** Enhance street lighting to provide for better pedestrian safety.

Goal TC-10 Provide well-designed and well-maintained off-street paths and trails.

Policy TC-10.2 Safe and Interconnected Trails. Work with other responsible/owner agencies to ensure the trails system is designed to be safe and interconnected,

- incorporating on-street connections where needed, designed for pedestrians and/or bicyclists, and consistent with other relevant plans.
- **Policy TC-10.3 Safe Trail Crossings.** Provide safe trail crossings at surface streets for all non-motorized users. This requires the installation of signs, striping, pavement markings, and actuated traffic control devices, where applicable.
- Goal TC-11 Increase the number of bicycle and pedestrian trips by users of all ages and abilities.
 - **Policy TC-11.1 Bicycle and Pedestrian Network.** Support a network of safe and comfortable bikeway and pedestrian facilities connecting neighborhoods and destinations in Pleasant Hill and adjacent jurisdictions.
 - **Policy TC-11.2 Street Design.** Require street cross-sections to accommodate bicyclists, micromobility users, and pedestrians.
 - **Policy TC-11.3 Protected Bicycle Facilities.** Consider incorporating protected bicycle and pedestrian facilities in higher density land use areas and along major transportation corridors to the greatest extent feasible.
- Goal TC-12 Strive to eliminate all fatal and serious injury bicycle and pedestrian related crashes.
 - **Policy TC-12.1** Collision Database. Create a traffic count data and collision database and work with applicable City departments and law enforcement to map collision data for identifying problem areas.
 - **Policy TC-12.2 Design Standards.** Support design upgrades to bicycle and pedestrian facilities to increase connectivity and safety citywide.
 - **Policy TC-12.3 Bicycle and Pedestrian Education.** Support bicycle and pedestrian safety education in all Pleasant Hill schools. Continue to support Safe Routes to Schools programs to address pedestrian and bicycle safety.
 - **Policy TC-12.4 Safe Routes to School (SR2S).** Support Safe Routes to School infrastructure and education & encouragement programs to address and enhance pedestrian and bicycle safety. Develop Suggested Route to School maps for Pleasant Hill schools to help prioritize infrastructure improvements along routes supporting student commutes.
 - **Policy TC-12.5 Technology Safety Enhancements.** Identify and deploy technology solutions to support bicycle and pedestrian safety through the City including passive detection systems at traffic signals and trail crossings.
 - **Policy TC-12.10 Safe Intersections for Bicycles.** Ensure adequate crossing times and detection for bicycle users at signalized intersections.
- Goal TC-14 Provide for the safe and efficient movement of goods to support commerce, industry, and the community.
 - **Policy TC-14.1** Minimize Truck Conflicts. Minimize potential conflicts between trucks and pedestrian, bicycle, and transit travel on streets designated as truck routes. [Source: New Policy]
 - **Policy TC-14.2 Minimize Truck Loading and Unloading Conflicts.** Minimize potential conflicts between truck loading and unloading and pedestrian, bicycle and transit travel.

The above goals and policies are intended to result in roadway designs that safely accommodate all users including pedestrians, bikes, and vehicles. Therefore, with respect to increases of hazards due to design features, the General Plan would result in a less than significant operational impact.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Emergency Vehicle Access

Significance Criterion d: Would the proposed plan result in inadequate emergency access?

Impact TRA-4 IMPLEMENTATION OF THE 2040 GENERAL PLAN WOULD NOT HAVE THE POTENTIAL TO RESULT IN INADEQUATE EMERGENCY ACCESS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to inadequate emergency access are limited to operational impacts. During future projects construction, two-way travel would be maintained. Should any roadways in the General Plan area experience temporary one-way travel restrictions or be closed to travel, there are multiple access routes to these plan areas, and construction detour signage would be provided. No respective construction impacts would occur.

Operation

As discussed in Section 3.9, Land Use/Planning and Population/Housing, the 2040 General Plan would result in an increase in population and development. Development facilitated by the 2040 General Plan would be required to meet all applicable current State and local codes and ordinances related to fire protection, which includes emergency access.

As mentioned in Section 3.11, *Public Services and Recreation*, development facilitated by the General Plan would be adequately served by Contra Costa County Fire Protection District Stations No. 2 and No. 5. Further, as mentioned in Section 3.7, *Hazards/Hazardous Materials and Wildfire*, development facilitated by the General Plan would not impede emergency access and response. Therefore, development within the General Plan area would be adequately served in case of a fire-related emergency. Development facilitated by the General Plan would be required to provide adequate accommodation of fire access to structure frontages, multiple access points to development, as well as adequate width, height, and turning radius of roadways and access points, pursuant to California Building Code requirements. Future projects that would not meet required standards and codes would not be allowed to be permitted by the City. Development facilitated by the General Plan would be required to comply with City and County standards and requirements and would undergo review by public safety officials as part of the approval process.

Emergency vehicle response times would continue to be reduced over time due to the ability of emergency vehicles to use vehicle preemption technology (where possible) and sirens; this capability would remain regardless of any roadway capacity modification. Roadway segments that would experience a reduction in vehicular roadway capacity, if any, would undergo individual operations analyses to assess the potential impacts to emergency vehicle access, and mitigation

measures would be developed as needed to reduce potentially significant impacts to less than significant levels. Additionally, development within the General Plan area would be required to comply with the California Fire Code, such as providing two separated and approved fire apparatus access roads that have a minimum width of 20 feet with turning radii of 25 feet inside and 45 feet outside. As such, there would be adequate emergency service and access associated with development facilitated by the General Plan.

Additionally, the 2040 General Plan includes the following goals, policies, and program related to provision of adequate emergency vehicle access to sites throughout Pleasant Hill:

- Goal TC-1 Establish and maintain a safe and efficient circulation system that emphasizes the use of existing arterial and collector roadways, paths, and bike lanes.
 - **Policy TC-1.2 Multi-Modal Travel Options.** Develop a connected network of vehicle, bicycle, and pedestrian facilities that provide continuous, safe, and comfortable travel for users of all ages, abilities, and transportation modes.
- Goal TC-2 Improve traffic circulation along the city roadway network.
 - **Policy TC-2.1 Traffic Plan Requirement.** Require new development to establish comprehensive construction traffic plans, for approval by City staff, which denote haul routes, detours, and other factors that may impact public safety.
- Goal TC-4 Reduce congestion and vehicle trips through land use planning.
 - **Policy TC-4.2 Develop Thoroughfares.** Develop and improve thoroughfares based on existing and proposed land use patterns and projected demand.
 - **Policy TC-4.5** Correlation Between Land Use and Transportation. Support land use patterns that make more efficient use of the transportation system, such as locating development near transit routes and high-quality bicycle/pedestrian facilities, minimizing new driveways, consolidating parking, and other best practice urban design measures.
- Goal TC-8 Encourage the development of a comprehensive and integrated transportation network with infrastructure and design features that allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, seniors, youth, and families.
 - **Policy TC-8.4 Multi-Modal Roadways.** Consider the needs of vehicles, bicycle, and pedestrians on all city roadways and facilities.
 - Policy HS-3.11 Evacuation Routes. The City shall collaborate with Contra Costa County and neighboring cities as a part of the next Multijurisdictional Hazard Mitigation Plan update to identify evacuation routes in the event of wildfires or other natural disasters in compliance with AB 747 and SB 99.

Hazards and Safety Element Implementation Programs

Program H

Contra Costa County Multijurisdictional Hazard Mitigation Plan. The City shall actively participate in the next update of the Contra Costa Multijurisdictional Hazard Mitigation Plan that, among other outcomes, will identify evacuation routes in the City in compliance with AB 747 and SB 99.

Implementation of California Fire Code emergency vehicle access requirements and the aforementioned 2040 General Plan policies would ensure that there would be adequate emergency vehicle access throughout Pleasant Hill. Therefore, 2040 General Plan operational impacts related to emergency vehicle access adequacy would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

3.12.5 Cumulative Impacts

The transportation impact analysis (see Appendix E) prepared for the proposed plan also accounts for future land use for the entire travel model area, which includes VMT on Contra Costa County roadways that originates within and outside of the County. Adjacent development considered part of the cumulative analysis includes the projects and plan listed in Table 3-1 (refer to Chapter 3, Environmental Impact Analysis).

Vehicle Miles Traveled

OPR provides the following guidance regarding cumulative impacts analysis and VMT:

When using an absolute VMT metric, i.e., total VMT (as recommended below for retail and transportation projects), analyzing the combined impacts for a cumulative impacts analysis may be appropriate. However, metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa.

The year 2040 total countywide VMT per service population (all residents and employees) is shown in Table 3.12-5. These metrics reflect VMT generated by all trips by all land uses in Contra Costa County, as well as non-County generated trips traveling on County roadways (i.e., all VMT within the Contra Costa County boundary). As shown in Table 3.12-5., Countywide boundary VMT per service population would decrease with the proposed plan, reflecting the travel efficiency that generally results from more dense, mixed-use development provided with the proposed plan.

Table 3.12-5 Countywide VMT Summary

Metrics	2022 No Project	2040 with Existing General Plan	2040 with Proposed General Plan Update
Total	25,881,707	29,624,735	29,610,708
County Service Population	1,585,472	1,915,682	1,928,393
VMT/Service Population	16.324	15.464	15.355
Does VMT per service population decrease with Project?			Yes

While VMT per service population would decrease countywide, based on OPR's guidance, included above, cumulative impacts would be commensurate with plan-level impacts. Because the analysis for the proposed plan is based on Home-Based VMT and Home-Work VMT, the significant VMT impact finding implies that the proposed plan would also have a cumulatively considerable contribution to a significant cumulative impact. Since project-level significance thresholds were designed to support long-term environmental goals, they inherently also address potential cumulative VMT impacts. As such, VMT would be cumulatively considerable. Therefore, the cumulative impact related to VMT would be significant and unavoidable.

Compatibility with Programs, Plans, Ordinances, and Policies Related to Circulation

Cumulative plans and projects, including the proposed plan, would be required to comply with local regulations and policies. The plans' incremental contribution to cumulative impacts would be less than significant.

Roadway Safety and Emergency Vehicle Access

Roadways constructed as part of the proposed plan in conjunction with other cumulative plans and projects listed in Table 3-1 would be constructed to meet current design standards in respective cities. Modifications to public rights-of-way would be consistent with appropriate regulations and design standards set forth by the respective city's applicable plans, programs, and policies. Similarly, cumulative development would also be required to comply with the respective city's regulations and policies. Trucks necessary to construct cumulative development would utilize truck routes designated by the respective cities and would not conflict with the automobile traffic and bicycle and pedestrian activity along respective city streets. If cumulative development would redesign city streets in such a way that would significantly impact roadway safety, they would be required by the respective city to mitigate such impacts. Nevertheless, Pleasant Hill's contribution to potential cumulative roadway safety impacts would not be cumulatively considerable. In addition, driveways and emergency vehicle access points associated with cumulative development would be constructed in compliance with the California Fire Code and other applicable regulations related to roadway safety and emergency access. Therefore, cumulative impacts related to roadway safety and emergency vehicle access would be less than significant.

Overall Level of Cumulative Significance

Significant and unavoidable

3.13 Utilities and Service Systems

3.13.1 Introduction

This section describes the existing conditions related to utilities and service systems (water, wastewater, stormwater, and solid waste) within the respective utility service areas, which cover the 2040 Pleasant Hill General Plan area vicinity as well as the relevant regulatory framework. This section also evaluates the impacts related to such utilities and service systems that could result from implementation of the proposed plan. Information in this section is based on information from the Contra Costa Water District (CCWD), East Bay Municipal Utility District (EBMUD), the Martinez Water District (MWD), and Pleasant Hill Department of Public Works. Note that electrical power and natural gas are addressed within Section 3.6, Greenhouse Gas Emissions and Energy.

3.13.2 Environmental Setting

Water

Water Source and Supply

The residences and businesses within the General Plan area are served by three water supply providers: 1) Contra Costa Water District (CCWD); 2) East Bay Municipal Utility District (EBMUD); and 3) Martinez Water District. The service area boundaries for the three water purveyors are shown on Figure 3.13-1. A description of each of these providers and the water source and supply provided by each is provided below.

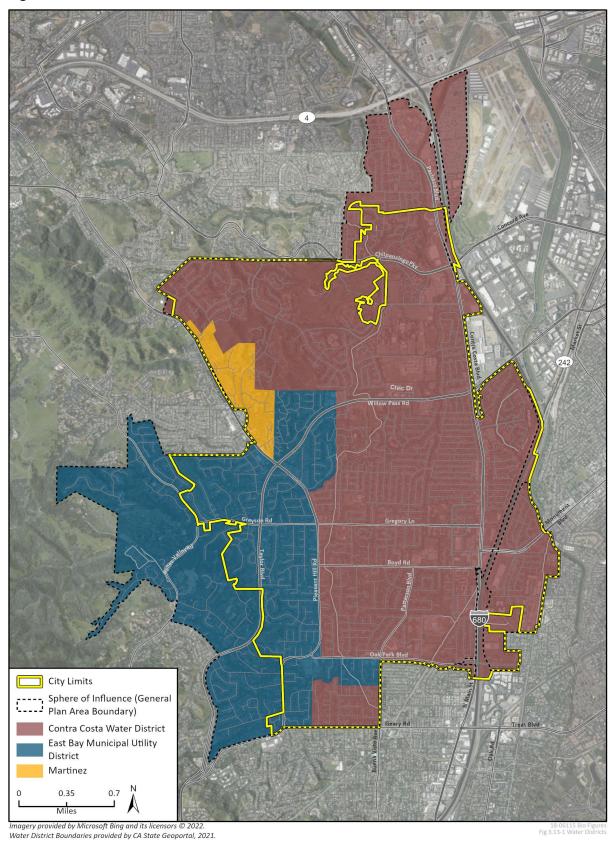
CONTRA COSTA WATER DISTRICT SERVICE AREA

CCWD provides water service to a portion of the City of Pleasant Hill. CCWD provides treated and untreated water to approximately 500,000 people in Contra Costa County. The District's service area encompasses most of central and northeastern Contra Costa County, a total area of more than 140,000 acres. The District obtains its water supply almost exclusively from the Sacramento-San Joaquin Delta at four intake facilities. The intakes are located at Rock Slough, Old River, Middle River at Victoria Canal, and Mallard Slough. The backbone of the District's water conveyance system is the 48-mile Contra Costa Canal, which starts at Rock Slough and ends at the Martinez Reservoir.

Four untreated water reservoirs, Los Vaqueros, Contra Loma, Mallard, and Martinez, provide a total of approximately 165,000 AF of storage. These reservoirs are used to store water for blending and water quality purposes, dry-year and emergency use, supplying during peak demands, and flow regulation. There are approximately 61,550 connections in the treated water service area covering the Cities of Clyde, Concord, Clayton, Pacheco, Port Costa, and portions of Martinez, Pleasant Hill, and Walnut Creek.¹

¹ Contra Costa Water District (CCWD). 2022. Service Area Map https://www.ccwater.com/289/Service-Area-Map. (accessed November 2022).

Figure 3.13-1 Water Districts in General Plan Area



EAST BAY MUNICIPAL UTILITY DISTRICT SERVICE AREA

A portion of the water supplied to the City of Pleasant Hill is provided by EBMUD, which provides service to approximately 1.4 million people in a 332-square-mile-area of the San Francisco Bay Area East Bay region.² Approximately 90 percent of the raw water entering EBMUD's system originates from the Mokelumne River watershed and approximately 10 percent originates from the protected watershed lands in the East Bay Area. EBMUD's water supply system consists of a network of reservoirs, aqueducts, water treatment plants, pumping plants, and other distribution facilities and pipelines that convey Mokelumne River water from the Pardee Reservoir to the EBMUD service areas. Recycled water is a critical element of EBMUD's water supply management policy and supplements EBMUD's limited drinking water supply, producing approximately 8.3 million gallons per day (mgd) in 2020 from the six existing recycled water projects with potential for additional recycled water projects to take place in the future. EBMUD does not currently have supplies of groundwater, stormwater, or desalinated water.³

MARTINEZ WATER DISTRICT SERVICE AREA

Martinez Water District supplies water to a small northwestern portion of Pleasant Hill residents. The District's water service area encompasses approximately 10,300 acres, extending from outside the City of Martinez limits into unincorporated Contra Costa County and the City of Pleasant Hill. The Martinez Water District receives untreated imported water from CCWD via the Contra Costa Canal, which is part of the Central Valley Project developed by the U.S. Bureau of Reclamation. The water is sold to and represents 100 percent of the water supply for the Martinez Water District's water service area. Therefore, water source and supply associated with the Martinez Water District are dependent on the availability of water through CCWD and are not further discussed within this EIR *Utilities and Service Systems* section; rather, the CCWD discussion in this EIR *Utilities and Service Systems* section is assumed to also encompass Martinez Water District aspects.

Water Demand and Use

CCWD SYSTEM

CCWD is responsible for preparing and implementing an Urban Water Management Plan (UWMP). The CCWD 2020 UWMP includes current and projected demand and water supply in five-year increments through the year 2045. As discussed within the UWMP, projected demands would be higher without water use efficiency measures, which play a key role in reducing future water demand and, thus, reduce the need for additional supplies. The CCWD system does not anticipate supply deficits in normal years or single-dry years throughout 2045 and may have supply shortfalls in future years of up to 15 percent of demand in the later years of a multiple dry year conditions. The CCWD UWMP states that the current CCWD system has capacity to meet future demands through continued use of its CVP contract, its own water rights, and balanced investments in conservation, recycled water, and water transfers.

² East Bay Municipal Utility District (EBMUD). 2022. Service area. https://www.ebmud.com/about-us/who-we-are/service-area/. (accessed November 2022).

³ East Bay Municipal Utility District (EBMUD). 2021. Urban Water Management Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/. (accessed November 2022).

⁴ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan. https://www.ccwater.com/289/Service-Area-Map. (accessed November 2022).

⁵ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan. https://www.ccwater.com/289/Service-Area-Map. (accessed November 2022).

EBMUD SYSTEM

EBMUD is also responsible for preparing and implementing an UWMP. The EBMUD 2020 UWMP includes an assessment of past and future water supplies and demands, evaluation of the future reliability of the region's water supplies through 2050, and discussion of demand management measures. EBMUD has water rights that allow for delivery of up to a maximum of 325 mgd. In addition, on average, local runoff supplies the East Bay 23 mgd. During multi-year droughts when the Mokelumne River and local runoff alone cannot meet projected customer demand, EBMUD signed a contract with the U.S. Bureau of Reclamation for delivery of Central Valley Project (CVP) water providing for delivery of up to 133,000 acre-feet (AF) or approximately 36,087 mgd in a single qualifying year, not to exceed a total of 165,000 AF or 44,769 mgd in three consecutive qualifying years. The EBMUD UWMP states that the current EBMUD system has capacity to meet water demands during normal, single dry, and second dry year demands through 2050; however, current water supply is not sufficient to meet water demands during third dry years. In 2020, EBMUD also updated its Water Shortage Contingency Plan (WSCP) that provides a framework for EBMUD to help address water shortages that may occur to ensure a reliable water supply.

GENERAL PLAN AREA

Water consumption patterns in the General Plan area is a function of many independent factors including growth, weather conditions, economic conditions, and water conservation efforts.

CONTRA COSTA WATER DISTRICT SERVICE AREA

According to the CCWD 2020 UWMP, total water supply demand for its service area in 2020 was 117,110 acre-feet per year (AFY), of which 32,600 AFY was for the Treated Water Service Area (TWSA)⁹ portion of the District and which the majority of Pleasant Hill is located within. Demands have fluctuation in the past ten years with declines seen a result of the recession and droughts and increases associated with growth and rebound from the recession and droughts.¹⁰

EAST BAY MUNICIPAL UTILITY DISTRICT SERVICE AREA

Demand for water in the EBMUD service area is primarily for municipal and industrial uses that include residential, commercial, institutional, industrial, and irrigation. According to the EBMUD 2020 UWMP, total water supply demand for its service area in 2020 was 202,880 AFY. ¹¹ While the number of EBMUD customers has increased steadily since 1970, the average daily water demand has not increased correspondingly; outside of droughts, demand remains relatively stable. ¹² Several factors contributed to keeping the overall water demand from rising as might otherwise be

⁶ East Bay Municipal Utility District (EBMUD). 2021. Urban Water Management Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/. (accessed November 2022).

⁷ East Bay Municipal Utility District (EBMUD). 2021. Urban Water Management Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/. (accessed November 2022).

⁸ East Bay Municipal Utility District (EBMUD). 2021. Water Shortage Contingency Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/. (accessed November 2022).

⁹ CCWD is a retail provider of treated water to approximately 205,000 residents in Clayton, Clyde, Concord, Pacheco, Port Costa and portions of Martinez, Pleasant Hill and Walnut Creek, referred to as the Treated Water Service Area (TWSA)

¹⁰ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan. https://www.ccwater.com/289/Service-Area-Map. (accessed November 2022).

¹¹ East Bay Municipal Utility District (EBMUD). 2020. Urban Water Management Plan. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan. (accessed November 2022).

¹² East Bay Municipal Utility District (EBMUD). 2020. Urban Water Management Plan. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan. (accessed November 2022).

anticipated, including EBMUD's water recycling and conservation programs, changes in customer usage patterns, and legislative changes.

Water Infrastructure and Distribution

WATER TREATMENT

Contra Costa Water District Service Area

CCWD operates three water treatment plants (WTP). The Bollman WTP, located in Concord, provides treated water to the City of Pleasant Hill. The 75 MGD Bollman WTP treatment process includes coagulation, flocculation, sedimentation, filtration, ozonation, and disinfection. The District's treated water distribution system consists of more than 800 miles of pipelines, 40 storage reservoirs with a total capacity of 72 million gallons, and 30 pump stations.

East Bay Municipal Utility District Service Area

EBMUD has six WTPs located in the EBMUD service area. Three of the WTPs are conventional treatment plants that use rapid mixing, flocculation, sedimentation, filtration, and free chlorine disinfection to treat water. Two of these plants, Sobrante and Upper San Leandro, also have ozone and peroxide for taste and odor control. The three inline WTPs have a simpler treatment process consisting of coagulation, filtration, and disinfection. They do not have a sedimentation process and rely on a pristine, low-turbidity raw water source in Pardee Reservoir. All the WTPs meet and exceed California drinking water regulations.

General Plan Area

No WTPs are located within the General Plan area. The City of Pleasant Hill receives water from the Sacramento San Joaquin Delta, Mokelumne Watershed, EBMUD Reservoir. All water derived from these sources is treated at one of two treatment plants: the Bollman WTP or the Walnut Creek WTP. The Bollman WTP primarily treats water from the CCWD System reservoirs and has both a peak capacity of 75 mgd and sustainable capacity of 72 mgd. The Walnut Creek WTP treats water from the EBMUD System reservoirs and has a permitted capacity of 115 mgd.

Wastewater

Wastewater Generation

CENTRAL CONTRA COSTA SANITARY DISTRICT SERVICE AREA

The City of Pleasant Hill is served by the Central Contra Costa Sanitary District (Central San), which is responsible for the collection, treatment, and disposal of wastewater within the Central San service area. Central San provides roughly 487,300 customers and 3,000 businesses with sanitary sewer service over 147 square miles in the central Contra Costa area. Formed in 1946 as a Special District in Contra Costa County, California, Central San has 294 budgeted employees and operates a 1,500-mile network of collection system piping and a treatment plant that processes an average daily flow of 32 million gallons.

The Central San wastewater collection system includes 1,535 miles of <6- to 102-inch-diameter sewers and 30,887 manholes across its service area. The system includes 18 sewage-pumping stations. Existing sewer lines convey wastewater generated by land uses within the City of Pleasant

Hill to the Central San Treatment Plant for treatment and then disposal or reuse.¹³ The Central San collection system master plan identifies facility improvements necessary to maintain collection service at or above this level.

Operation of the collection system is subject to the SWRCB's General Waste Discharge Requirement (Order No. 2006-0003) to reduce sanitary sewer overflows (SSOs) by requiring all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan (SSMP). Central San updated their SSMP in 2022 which seeks to provide a plan and schedule to properly manage, operate, and maintain all parts of the district's sanitary sewer system. ¹⁴ In addition to the SSMP, the Central San Treatment Master Plan identifies facility improvements necessary to maintain treatment service at or above the current level, which are prioritized and scheduled for implementation in an annually updated Capital Improvement Budget and 10-year Capital Improvement Program.

GENERAL PLAN AREA

Central Sans owns and operates 18 pump stations and associated force mains. The collection system is sized for an average dry weather flow of up to 32 MGD and a peak wet weather flow of approximately 230 MGD.

Wastewater Treatment

CENTRAL CONTRA COSTA SANITARY DISTRICT SERVICE AREA

Central San operates the Central San Wastewater Treatment Plant (WWTP) where wastewater is treated and then discharged into Suisun Bay. The Central San WWTP is located in an unincorporated area of Contra Costa County adjacent to the City of Martinez. The Central San WWTP has a treatment capacity of 54 million gpd and treats an average of 35.6 million gallons of wastewater per day. ¹⁵ On average, the WWTP processes approximately 32 million gallons of wastewater each day during the dry season and can see peak flows as high as an estimated 230 million gallons per day during an extreme winter storm. ¹⁶ Approximately 600 million gallons per year are treated to a tertiary level through additional filtration and disinfection before being distributed as recycled water for landscape irrigation, industrial processes, and plant operations.

GENERAL PLAN AREA

Wastewater generated in the General Plan area is conveyed to the Central San Wastewater Treatment Plant (WWTP) where it is treated and then discharged into Suisun Bay.

¹³ Contra Costa Water District (CCWD). 2016. 2015 Urban Water Management Plan.

¹⁴ CCCSD, Central Contra Costa Sanitary District. 2022. Central Contra Costa Sanitary District Sewer System Management Plan, Adopted October 6, 2022. https://www.centralsan.org/sites/main/files/file-

 $attachments/2020_ssmp_approved_audit_06.05.2020.pdf?1620312805. \ (accessed\ November\ 2022).$

¹⁵ Central Contra Costa Sanitary District (Central San). 2022. Central San Treatment Plant. https://www.centralsan.org/treatment-plant. (accessed November 2022).

¹⁶ Central Contra Costa Sanitary District (Central San). 2017. Comprehensive Wastewater Master Plan Executive Summary. https://www.centralsan.org/sites/main/files/file-attachments/cwmp_executive_summary.pdf?1510867154. (accessed November 2022).

Stormwater

Stormwater Infrastructure and Collection

CONTRA COSTA COUNTY PUBLIC WORKS SERVICE AREA

Pleasant Hill is located within the Contra Costa County Public Works stormwater service area. The Contra Costa County Flood Control and Water Conservation District guides regional drainage plans throughout incorporated and unincorporated County areas. All stormwater drains into Suisun Bay via stormwater drainage systems and regional creeks and streams. The County Watershed Program is responsible for ensuring that the County complies with its municipal stormwater NPDES permits in unincorporated County land only. ¹⁷ The Contra Costa Clean Water Program (CCCWP) is responsible for ensuring that the County and incorporated cities comply with its municipal stormwater NPDES permits. Contra Costa County Public Works owns and maintains unincorporated County drainage facilities. Incorporated cities within the service area of the Contra Costa County Public Works maintain drainage facilities within the municipality City limits. ¹⁸

The CCCWP offers education and outreach to residents and businesses throughout the County to help them reduce stormwater pollution. In addition, the CCCWP provides Best Management Practice (BMP) information and pollution prevention for municipal operations, new and redevelopment planning, industrial/commercial site controls, water quality monitoring, pesticide toxicity controls, trash reduction in creeks and land, mercury and Polychlorinated Biphenyl (PCB) controls, and other stormwater related compliance and enforcement activities through education and outreach to the public. ¹⁹

GENERAL PLAN AREA

Pleasant Hill is within the CCCWP Central County Watersheds Planning Unit which includes the cities Concord, Clayton, Pleasant Hill, Walnut Creek, and Lafayette. Stormwater in this area generally drains from the Mount Diablo foothills through suburban areas to Suisun Bay (Walnut Creek and Mount Diablo Creek), which is tributary to San Pablo Bay, or the Sacramento-San Joaquin Delta (Willow and Kirker Creeks). 20 Stormwater runoff within the City of Pleasant Hill is collected and disposed of by an integrated system of storm drains, inlets, curbside gutters, catch basins, drainage ditches, and man-made channels. City of Pleasant Hill maintenance personnel inspect, clean, and maintain over 1,500 storm drains within Pleasant Hill, covering over 150 miles of piping systems, ensuring inlets and drains are clear of debris in order to ensure stormwater flows freely to Suisan Bay. 21

¹⁷ Contra Costa County Flood Control District. 2019. http://www.cccounty.us/5586/Flood-Control. (accessed November 2022).

¹⁸ Contra Costa County Flood Control and Water Conservation District. Drainage, Watershed, and Water Quality FAQs, page 5.

¹⁹ Contra Costa Clean Water Program (CCCWP). 2022, Program Activities. https://www.cccleanwater.org/about/program-activities. (accessed November 2022).

²⁰ Contra Costa Clean Water Program (CCCWP). 2019. Contra Costa Watersheds Stormwater Resource Plan. https://www.cccleanwater.org/userfiles/kcfinder/files/CCW%20SWRP%20Main%20%2B%20App%20A.pdf. (accessed December 2022). ²¹ City of Pleasant Hill. Streets, Storm Drains, and Graffiti. 2022. https://www.ci.pleasant-hill.ca.us/170/Streets-Storm-Drains-Graffiti. (accessed November 2022).

Telecommunications

Telecommunication services include telephone service (both landlines and mobile service) and internet service for businesses and homes.

Telecommunications Demand

CITY OF PLEASANT HILL (GENERAL PLAN AREA)

The City of Pleasant Hill telecommunications demand is met by Xfinity and AT&T within the General Plan area.

Telecommunications Infrastructure and Distribution

CITY OF PLEASANT HILL (GENERAL PLAN AREA)

Telecommunications infrastructure within Pleasant Hill includes underground optical fibers, cell towers, and standard phone equipment and internet routers. Telecommunications providers own and operate infrastructure, such as cellphone towers and fiber optic cables, within Pleasant Hill (the Genera Plan area).

Solid Waste

Solid Waste Collection

REPUBLIC SERVICES SERVICE AREA

Republic Services provides residential and commercial solid waste, organics, and recycling collection services. Republic Services provides collection services to multiple Contra Costa County cities and unincorporated areas within the county. In addition to collection services, Republic Services provides free waste audits, information for tenants, and indoor recycling receptacles for customers.

GENERAL PLAN AREA

Republic Services provides residential and commercial solid waste and recycling collection services for the General Plan area. Pleasant Hill's solid waste is processed at the Republic Services Contra Costa Transfer Station at 951 Waterbird Way in Martinez. Solid waste is then transported Acme and Keller Canyon Landfills, located in located in the City of Martinez and City of Pittsburg, respectively.

Solid Waste Disposal

REPUBLIC SERVICES SERVICE AREA

According to the California Department of Resources Recycling and Recovery (CalRecycle), the Acme Landfill has a remaining capacity of approximately 506,590 cubic yards. ²² The Keller Canyon Landfill has a remaining capacity of 63,408,410 cubic yards. Table 3.13-1 shows the estimated permitted and remaining capacity and current status of the Acme and Keller Canyon Landfills. ²³ Republic Services takes Pleasant Hill commercial and residential organics to a composting facility at Golden

²² CalRecycle. 2019 SWIS Facility/Site Activity Details Acme Landfill (07-AA-0002).

https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4396?siteID=217. (accessed November 2022).

²³ CalRecycle. 2019 SWIS Facility/Site Activity Details Keller Canyon Landfill (07-AA-0032).

https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228. (accessed November 2022).

Bear Transfer Station/West Contra Costa Sanitary Landfill in Richmond, CA, which has a current processing capacity of 85,000 tons/year of green waste/food waste.²⁴

Table 3.13-1 Estimated Landfill Capacity and Closure Date

Landfill Facility	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Status
Acme Landfill ²⁵	6,195,000	506,590	Active
Keller Canyon Landfill ²⁶	75,018,280	63,408,410	Active
Source: Cal Recycle			

Municipal solid waste comes from primarily the Bay Area region, but also from more distant municipalities and cities. CalRecycle reports that in 2019 a total of 24,482 tons of solid waste from Pleasant Hill was disposed at 15 different landfills.

GENERAL PLAN AREA

The City's Solid Waste and Recycling Program manages the City's Solid Waste Ordinance and the City's waste hauling franchise with Republic Services. The program also develops programs for diversion from the landfills, and recycling grants for used motor oil, and beverage containers.²⁷ Over 94 percent (23,144 tons) of Pleasant Hill's solid waste generated in 2019 went to the Keller Canyon Landfill.²⁸

3.13.3 Regulatory Framework

Federal Regulations

Clean Water Act

The federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. Environmental Protection Agency the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. At the State and regional levels in California, the act is administered and enforced by the SWRCB and the nine Regional Water Quality Control Boards (RWQCBs).

²⁴ Email correspondence on November 15, 2022 with Ann James, P.E., Maintenance Superintendent at the City of Pleasant Hill

²⁵ CalRecycle. 2019 SWIS Facility/Site Activity Details Acme Landfill (07-AA-0002).

https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4396?siteID=217. (accessed November 2022).

²⁶ CalRecycle. 2019 SWIS Facility/Site Activity Details Keller Canyon Landfill (07-AA-0032).

https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228. (accessed November 2022).

²⁷ Pleasant Hill, City of. 2022. Trash & Recycling Services in Pleasant Hill. https://www.pleasanthillca.org/382/Solid-Waste-Recycling-Program. (accessed December 2022).

²⁸ CalRecycle. 2020. Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility.

https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility. (accessed November 2022).

Clean Water Act Section 402

Section 402 of the Clean Water Act requires that all construction sites on an acre or greater of land, as well as municipal, industrial and commercial facilities discharging wastewater or stormwater directly from a point source, such as a pipe, ditch, or channel, into a surface water of the United States must obtain permission under the NPDES permit. All NPDES permits are written to ensure that the surface water receiving discharges will achieve specified water quality standards.

National Pollutant Discharge Elimination System

The NPDES permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

Title 40 of the Code of Federal Regulations

Title 40 of the Code of Federal Regulations (CFR), Part 258 (Resource Conservation and Recovery Act RCRA, Subtitle D) 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.

State Regulations

California Sustainable Groundwater Management Act

In September 2014, Governor Brown signed legislation requiring that California's critical groundwater resources be sustainably managed by local agencies. The Sustainable Groundwater Management Act gives local agencies the power to sustainably manage groundwater and requires groundwater sustainability plans to be developed for medium- and high-priority groundwater basins.

California Senate Bills 610 and 221 (Water Supply Assessment and Verification)

Senate Bills (SB) 610 and 221 amended State law, effective January 1, 2002, to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability to be provided to city and county decision-makers prior to approval of specified large development projects with greater than 500 dwelling units or 500,000 square feet of commercial space. Both statutes also require this detailed information to be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610 water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects as defined in Water Code 10912 subject to CEQA. Under SB 221

approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

California Water Plan

The California Department of Water Resources is responsible for preparing and updating the California Water Plan, which is a policy document that guides the development and management of State water resources. The plan is updated every five years to reflect changes in resources and urban, agricultural, and environmental water demands. The California Water Plan suggests ways of managing demand and augmenting supply to balance water supply with demand.

California Urban Water Management Planning Act

In 1983 the California Legislature enacted the Urban Water Management Planning Act (Water Code Section 10610–10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act requires that urban water suppliers adopt an urban water management plan at least once every five years and submit them to the Department of Water Resources. Noncompliant urban water suppliers are ineligible to receive funding pursuant to Division 24, commencing with Section 78500, or Division 26, commencing with Section 79000, or receive drought assistance from the State until the UWMP is submitted and deemed complete pursuant to the Urban Water Management Planning Act.

California Senate Bill 7x7 (Statewide Water Conservation)

In November 2009 the California State Legislature passed and the Governor approved a comprehensive package of water legislation, including SB 7x7 addressing water conservation. In general SB 7x7 requires a 20 percent reduction in per capita urban water use by 2020, with an interim 10 percent target in 2015. The legislation requires urban water users to develop consistent water use targets and to use those targets in their UWMPs.

Porter-Cologne Water Quality Control Act (California Water Code)

The State of California is authorized to administer Federal or State laws regulating water pollution within the State. The Porter-Cologne Water Quality Control Act (Water Code Section 13000, et seq.) includes provisions to address requirements of the Clean Water Act. These provisions include National Pollutant Discharge Elimination System (NPDES) permitting, dredge and fill programs, and civil and administrative penalties. The Porter-Cologne Act is broad in scope and addresses issues relating to the conservation, control, and utilization of the water resources of the State. Additionally, the Porter-Cologne Act states that the quality of all the waters of the State, including groundwater and surface water, must be protected for the use and enjoyment by the people of the State.

In California, the NPDES program is administered by the SWRCB through the Regional Water Quality Control Boards (RWQCB) and requires municipalities to obtain permits that outline programs and activities to control wastewater and stormwater pollution. The federal Clean Water Act prohibits discharges of stormwater from construction projects unless the discharge is in compliance with an NPDES permit. The SWRCB is the permitting authority in California, and adopted an NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, otherwise known as the Construction General Permit (Order 2009-0009, as amended by Orders

2010-0014-DWQ and 2012-006-DWQ). The Order applies to construction sites that include one or more acre of soil disturbance. Construction activities include clearing, grading, grubbing, excavation, stockpiling, and reconstruction of existing facilities involving removal or replacement. The Construction General Permit requires that the landowner and/or contractor file permit registration documents prior to commencing construction and then pay a fee annually through the duration of construction. These documents include a notice of intent, risk assessment, site map, stormwater pollution prevention plan (SWPPP), and signed certification statement. The SWPPP must include measures to ensure that: all pollutants and their sources are controlled; non-stormwater discharges are identified and eliminated, controlled, or treated; site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and BMPs installed to reduce or eliminate pollutants after construction are completed and maintained. The Construction General Permit specifies minimum BMP requirements for stormwater control based on the risk level of the site. The Permit also specifies minimum qualifications for a qualified SWPPP developer and qualified SWPPP practitioner.

State Water Resources Control Board General Waste Discharge Requirement

The SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows (SSOs) by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

The SWRCB has delegated authority to nine Regional Water Quality Control Boards (RWQCB) to enforce these requirements within their region. NPDES permits allow the RWQCB to regulate where and how the waste is disposed, including the discharge volume and effluent limits of the waste and the monitoring and reporting responsibilities of the discharger. The San Francisco Bay RWQCB issues and enforces NPDES permits in Pleasant Hill.

California Assembly Bill 939

AB 939 (Public Resources Code 41780) requires cities and counties to prepare integrated waste management plans and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare Source Reduction and Recycling Elements as part of the integrated waste management plans. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing and stimulate the purchase of recycled products.

California Assembly Bill 341

The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. AB 341 required all businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units to recycle by July 1, 2012. AB341 also sets a statewide goal of 75 percent waste diversion.

California Senate Bill 1016

SB 1016 requires that the 50 percent solid waste diversion requirement established by AB 939 be expressed in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Beginning January 1, 2018, the Board will be required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

California Senate Bill 1383

SB 1383 was adopted in September 2016 and establishes targets to achieve a 75 percent reduction in the level of Statewide landfilled organic waste from the 2014 level by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. In addition, SB 1383 regulations require that jurisdictions conduct education and outreach on organics recycling to all residents, businesses, haulers, solid waste facilities, and local food banks and other food recovery organizations.

Regional and Local Regulations

CCWD 2020 Urban Water Management Plan

The CCWD 2020 UWMP is an update to the 2015 UWMP adopted by the District's Board of Directors and is prepared in compliance with the California Urban Water Management Planning Act. The UWMP includes the District's planning activities to ensure adequate water supplies to meet existing and future demands for water. The 2020 UWMP presents information on the District's supply and demand forecasts, conservation programs, water demand management measures, and recycled water opportunities through the year 2045. The 2020 UWMP addresses the requirements of the Water Conservation Bill of 2009, SB X7-7, demonstrating compliance with the 2020 per capita water use target reduction, as well as more recent legislation, AB 1668 and SB 606, with inclusion of a Drought Risk Assessment and Water Shortage Contingency Plan. The UWMP also includes a description of the plan adoption, public coordination, and planning coordination activities.

EBMUD 2020 Urban Water Management Plan

The EBMUD UWMP 2020 is an update of the UWMP 2015. It is designed to satisfy the requirements of the Urban Water Management Planning Act and provide the public with a supply and demand report on EBMUD's progress in implementing conservation and water recycling programs, including efforts to secure supplemental water supply sources. The UWMP 2020 also contains data on EBMUD's compliance with SB X7-7, the state law mandating that urban water agencies reduce water use in order to achieve a statewide reduction of 20% by 2020. EBMUD prepared the UWMP 2020 to comply with all current applicable regulations and statutes. In adopting its UWMP, EBMUD commits to managing water demand efficiently using its water supplies to protect both its customers and its water and natural resources, and making every effort to ensure the appropriate level of water service reliability is met given varied water demands during normal, dry, and multiple dry years.

Contra Costa Clean Water Program

The CCCWP includes 21 local government agencies who each own and operate a Municipal Separate Storm Sewer System (MS4). The primary goal of CCCWP is to reduce the pollution carried by stormwater throughout Contra Costa County into creeks, wetlands, and the Bay/Delta. CCCWP is responsible for maintaining compliance with the NPDES Stormwater Discharge Permit within the County and works to promote stormwater pollution prevention.

Municipal Stormwater Permitting Program

The San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049 (MRP) issues the Waste Discharge Requirements and NPDES Permit for the discharge of stormwater runoff from the municipal separate storm sewer systems (MS4s) of over 70 municipalities, including Pleasant Hill, and local agencies in five Bay Area counties²⁹. Under the MRP, permittees are prohibited from non-stormwater discharges into storm drain systems and watercourses. Permitted discharges must not cause or contribute to a violation of any applicable water quality standard for receiving waters. Upon a determination by either the MRP permittee(s) or the RWQCB that discharges are causing or contributing to an exceedance of an applicable water quality standards, the permittee(s) must notify, within no more than 30 days, and thereafter submit a report to the RWQCB. The report must describe controls or best management practices (BMPs) that are currently being implemented, and the current level of implementation, and additional controls or BMPs that will be implemented, and/or an increased level of implementation, to prevent or reduce the discharge of pollutants that are causing or contributing to the exceedance of water quality standards. The MRP also sets forth requirements for monitoring water quality.

Provision C.3 of the MRP establishes discharge requirements for new development and redevelopment projects. The goal of Provision C.3 is for the MRP permittees to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects.

According to the MRP, this goal is to be accomplished primarily through the implementation of low impact development (LID) techniques.

Pleasant Hill General Plan

The current Pleasant Hill General Plan contains policies related to utilities and service systems, but they would be replaced by the proposed 2040 General Plan.

Pleasant Hill Municipal Code Title 18 (Planning and Land Use) and Title 14 (Buildings and Construction)

The City of Pleasant Hill Municipal Code contains all ordinances for the City of Pleasant Hill. The Municipal Code is organized by Title, Chapter, and Section. The current Municipal Code is up to date through Ordinance 956, passed April 4, 2022.

²⁹ SWRCB. 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf. (accessed March 2022).

CHAPTER 18.52 WATER-EFFICIENT LANDSCAPING

This chapter ensures the requirements of the State Water Conservation in Landscaping Act (Government Code §§ 65591–65599) are implemented. This chapter would require all projects to submit a water-efficient landscape plan and have the plan approved prior to construction. The water-efficient landscape plan would include calculations of the maximum applied water allowance and estimated total water use. In addition, the water-efficient landscape plan would include required elements of plant materials, irrigation system design, water features, and grading and soil preparation.

CHAPTER 14.40 CONSTRUCTION AND DEMOLITION DEBRIS

The proposed plan shall comply with this chapter as a condition of approval, which shall require a Waste Management Plan (WMP). The WMP shall include the following:

- The total square footage of the area to be constructed or demolished;
- a list of the C&D debris material types to be generated;
- The identity of the vendor(s) or facility(ies) that the applicant proposes to use to collect or receive that material; and
- An acknowledgement of responsibility that the applicant understands the consequences of not meeting the 65% diversion requirement and that the applicant is responsible for the actions of their contractors or other agents with regard to the diversion requirement.

3.13.4 Impacts and Mitigation Measures

Significance Criteria

The City of Pleasant Hill utilizes the following 2022 CEQA Guidelines Appendix G significance criteria questions related to Utilities and Service Systems.

Would the 2040 General Plan:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Approach to Analysis

Environmental impacts to utilities and service systems have been assessed using impact significance criteria from federal, State, and local regulations. The impact analysis is based on available literature

regarding the existing plans, policies, and resources in the General Plan area. Criteria used during this analysis are described below:

Water

The water supply analysis in this section is based on information included in the Urban Water Management Plans (UWMPs) for each of the aforementioned districts. The availability of data from UWMPs is complex for the proposed plan, because the City of Pleasant Hill is served by multiple water supply providers and the respective UWMP boundaries do not align with the boundaries of the General Plan area. In addition, each of the three separate water suppliers have used different types of assumptions to make water demand estimates for their service territories. Therefore, an "apples to apples" comparison of water use and forecasted water demand in each service territory is not possible based on available published data. Therefore, in order to characterize water supply availability using the most reliable available information, this analysis relies upon data provided in the CCWD UWMP and the EBMUD UWMP. These two UWMPs provide detailed system description, system demands (including cumulative growth assumptions), water reduction planning, system supplies, water quality information, groundwater information, water supply reliability information, water shortage contingency planning, demand management measures, as well as information on climate change.

Wastewater

Wastewater production was calculated and compared with treatment capacity to determine whether wastewater treatment requirements would be exceeded. Wastewater discharge permitting requirements were also reviewed.

Stormwater

Stormwater production was calculated and compared with City of Pleasant Hill stormwater facility treatment capacity to determine whether stormwater collection requirements would be exceeded.

Solid Waste

Solid waste production was calculated and compared with the applicable landfill capacity to determine whether landfill daily permitted capacity and total storage capacity would be exceeded. The City's solid waste regulations and policies were also reviewed.

Telecommunications

The telecommunications providers in the City of Pleasant Hill were identified and ability to provide service verified.

See Section 3.6, *Greenhouse Gas Emissions and Energy*, for discussions related to electricity and natural gas.

EIR Scoping Comments Consideration

This section programmatically addresses an EBMUD EIR scoping comment about analyzing impacts of water service and future development within EBMUD's service area; see discussions under Impact UTL-1 and Impact UTL-2. In addition, this section addresses an EIR scoping comment about future water supply which is addressed within Impact UTL-2.

Specific Thresholds of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of utilities and service systems impacts resulting from implementation of the proposed plan.

- Create a need for relocated, new, or expanded water supply, wastewater treatment, stormwater drainage facilities, or telecommunications facilities, the construction of which would result in significant construction-related transportation, air quality, GHG emissions, energy, or noise impacts. If new or altered facilities are proposed or determined to be needed, then determination of significance of construction-related transportation, air quality, GHG emissions, energy, or noise impacts is based on the respective specific thresholds of significance listed in Section 3.12, Transportation; Section 3.2, Air Quality; Section 3.6, Greenhouse Gas Emissions and Energy; and Section 3.10, Noise.
- Result in insufficient water supply to serve the proposed plan's potable water demand during normal, dry, and multiple dry years.
- Inadequate capacity at the Central San facility to serve the proposed plan's wastewater generation
- Insufficient daily capacity or permitted daily capacity at the Keller Canyon Landfill and Acme Landfill to serve waste generation of the proposed plan.
- Unable to comply with AB 939 solid waste diversion goals.

Impact Evaluation

Need for Water, Wastewater, Stormwater, and Telecommunication Facilities

Significance Criterion a: Would the proposed plan require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact UTL-1 Development under the 2040 General Plan would increase demand for water, wastewater, stormwater, and telecommunications services. While utility facilities and infrastructure development and relocation facilitated by the proposed plan would occur in developed areas of Pleasant Hill where such facilities exist, construction-related impacts would be significant and Unavoidable even with mitigation.

Construction

No new or expanded water, wastewater, stormwater, or telecommunications facilities are specifically proposed as part of the 2040 General Plan. However, the 2040 General Plan would provide the framework for development of up to 19,216 net new primary and accessory dwelling residential units in the city of Pleasant Hill. As a result, CCWD, EBMUD, Martinez Water District, Central San, and local telecommunications providers could need to increase their water supply, wastewater, stormwater, and telecommunications services to the City of Pleasant Hill through the year 2040, which could in turn require the construction of new or expanded facilities to accommodate additional utility supply and collection. The placement and potential impacts of a new utility infrastructure and facilities are unknown at this time; if construction or expansion of future facilities are needed, separate environmental review would be required, which could result in development and implementation of future project-specific construction-related mitigation measures. The 2040 General Plan facilitates development within areas of Pleasant Hill that are

currently developed. As such, construction of new utility infrastructure or facilities, if required, would likely occur on property previously disturbed or developed and thus within the programmatic analysis for buildout under the 2040 General Plan as analyzed throughout this EIR. Additionally, construction would be required to comply with all applicable federal, State, and local regulations governing the provision of utility infrastructure and utilities. This would reduce the potential for adverse construction impacts associated with construction of new or expanded utility and infrastructure and facilities associated with implementation of the 2040 General Plan. However significant and unavoidable construction impacts associated with air quality, historic resources, paleontological resources, and noise were determined in Sections 3.2, *Air Quality*, 3.4, *Cultural and Tribal Cultural Resources*, 3.5, *Geology, Soils, and Mineral Resources*, and 3.10, *Noise*, respectively. Therefore, construction impacts related to potential need for new or expanded utility infrastructure and facilities would be considered significant and unavoidable.

Operation

WATER

The UWMPs for both CCWD and EBMUD determined that there are sufficient water supplies to accommodate the anticipated population growth throughout their respective service areas according to ABAG Plan Bay Area 2040 projections. In addition, the General Plan area is located in urbanized parts of both the CCWD and EBMUD service areas. As discussed under Impact UTIL-2, there would be sufficient water supplies available to serve the 2040 General Plan and reasonably foreseeable future development during normal, dry, and multiple dry years. In compliance with the California Fire Code, Part 9 of the California Building Standards Code (CBC), development facilitated under both plans would follow standards for fire safety such as fire flow requirements for buildings, fire hydrant location, and distribution criteria.

Furthermore, CCWD is in the process of updating its Treated Water Master Plan, which utilizes information from cities and the County General Plans for land use to develop future demand projections to identify improvements to the system needed to meet growth. The update to general plans will require a review by CCWD to determine if modifications or additional improvements to the system are necessary to support development in the proposed plan. With implementation of the above policies, sufficient water supply and WTP capacity would be maintained. As such, new or expanded water facilities are not anticipated to be required due to operational demand.

In addition, the 2040 General Plan contains the following goals and policies that would ensure adequate utility capacity and infrastructure:

Goal PFS-1 Ensure adequate water supply to existing and future development.

- **Policy PFS-1.2** Infrastructure Maintenance. Collaborate with water providers in their efforts to maintain wastewater conveyance, treatment, and disposal infrastructure in good working conditions within the city.
- **Policy PFS-1.5** Water Services Requirement. Ensure that water services for new developments does not negatively affect service to existing uses.
- **Policy PFS-1.6** Water Provider Coordination. Coordinate with water providers to ensure that new proposed development can be adequately served by the water supply system prior to approving the development.

However, even with implementation of the aforementioned policies, there could be potential need for future water pipeline upsizing and infrastructure connections. Since significant and unavoidable construction impacts associated with air quality, historic resources, paleontological resources, and noise were determined in Sections 3.2, *Air Quality*, 3.4, *Cultural and Tribal Cultural Resources*, 3.5, *Geology, Soils, and Mineral Resources*, and 3.10, *Noise*, respectively, operational impacts related to potential need for new or expanded water supply utility infrastructure and facilities would be considered significant and unavoidable. Wastewater

Implementation of the proposed plan could have a significant impact if the wastewater treatment provider would not have sufficient capacity to serve the proposed new land uses in addition to the provider's existing commitments.

Growth and development facilitated by the 2040 General Plan would create additional demand for wastewater treatment in Pleasant Hill. However, development facilitated by the 2040 General Plan would occur within the urbanized areas of the city where existing wastewater infrastructure is present. Similar to water infrastructure, increased density could require upgraded wastewater pipelines or pumps. Development facilitated by the General Plan is projected to result in approximately 19,216 net new primary and accessory dwelling residential units in Pleasant Hill that in turn would result in approximately 46,119 new residents by the year 2040. As discussed under Impact UTIL-3, there would be adequate capacity to serve the 2040 General Plan's wastewater demand.

Development facilitated under the 2040 General Plan would undergo review by Central San to ensure that development does not encroach on easements for sewer pipes, and applicants would be responsible for the payment of standard sewer connection fees, as necessary. ³⁰ In addition, the following 2040 General Plan goals and policies would ensure new development is connected to the existing sanitary sewer system and that wastewater service is adequate.

Goal PFS-1 Ensure adequate water supply to existing and future development.

- **Policy PFS-1.2** Infrastructure Maintenance. Collaborate with water providers in their efforts to maintain wastewater conveyance, treatment, and disposal infrastructure in good working conditions within the city.
- **Policy PFS-1.5** Water Services Requirement. Ensure that water services for new developments does not negatively affect service to existing uses.
- **Policy PFS-1.6** Water Provider Coordination. Coordinate with water providers to ensure that new proposed development can be adequately served by the water supply system prior to approving the development.
- Goal PFS-2 Ensure that adequate wastewater facilities and services are available to meet the needs of existing and future development.
 - **Policy PFS-2.1** Infrastructure Maintenance. Collaborate with Central San in their efforts to maintain wastewater conveyance, treatment, and disposal infrastructure in good working conditions within the city.
 - **Policy PFS-2.2** New Development. Coordinate the review of development proposals with Central San to ensure that new development can be adequately served.

³⁰ Pleasant Hill, City of. 2022. Planning Resource Links – Contra Costa County Sanitation District. https://www.pleasanthillca.org/153/Planning-Resource-Links. (accessed November 2022).

Policy PSF-2.3 Wastewater Services Requirement. Ensure that wastewater services for new development does not negatively affect service to existing uses.

Public Facilities, Services, and Infrastructure Element Implementation Programs

- **Program B** Capital Improvements Program. When updating the Capital Improvements Program, identify and include the following:
 - Projects that could also support green infrastructure improvements.
 - Street improvements consistent with emergency vehicle access standards.
 - City-sponsored projects necessary to maintain or improve levels of performance.

However, even with implementation of the aforementioned policies, there could be potential need for future wastewater pipeline upsizing and infrastructure connections. Since significant and unavoidable construction impacts associated with air quality, historic resources, paleontological resources, and noise were determined in Sections 3.2, *Air Quality*, 3.4, *Cultural and Tribal Cultural Resources*, 3.5, *Geology, Soils, and Mineral Resources*, and 3.10, *Noise*, respectively, operational impacts related to potential need for new or expanded wastewater utility infrastructure and facilities would be considered significant and unavoidable.

STORMWATER

As described in Impact HYD-1 in Section 3.8, *Hydrology and Water Quality*, development facilitated by the 2040 General Plan would reduce the extent of impervious surfaces within the General Plan area, which could in turn reduce stormwater runoff that enters the City's municipal storm drain system. In addition, because the 2040 General Plan is focused on infill development, the conversion of open space and permeable surfaces to impervious surfaces would be minimized. Furthermore, the amount of impervious surfaces would be reduced through implementation of Best Management Practices, including Low Impact Development (LID) approaches, aimed at reducing stormwater runoff to ensure downstream storm drain capacity is not exceeded. Therefore, stormwater generated by development facilitated by the proposed plan would not exceed the capacity of existing or planned stormwater drainage and storage systems.

In addition, the 2040 General Plan contains the following goals and policies that would ensure adequate stormwater capacity and infrastructure:

- **Policy ENV-2.1 Drainage System Maintenance.** Maintain and upgrade the city drainage system, including regularly clearing drainage systems of debris build up that exacerbates flood impacts.
- **Policy ENV-2.2 Drainage Improvements.** Cooperate with regional agencies to complete regional storm drainage improvements.
- Goal PFS-3 Provide a resilient, sustainable stormwater management system that reduces runoff volume and minimizes flood potential from existing and future development.
 - **Policy PFS-3.1 NPDES Permit Activities.** Implement NPDES permit activities in compliance with State and Federal law to prevent stormwater pollution.

- **Policy PFS-3.2 Drainage Facility Maintenance.** Collaborate with property owners, the Flood Control District to regularly maintain and provide funding for all drainage facilities to ensure that they continue operating at full carrying capacity.
- Policy PFS-3.3 Green Infrastructure. Require new developments to install green infrastructure as required by the permit conditions of the Regional Water Quality Control Board, as part of their natural stormwater drainage systems, including but not limited to pervious pavement, infiltration basins, raingardens, green roofs, rainwater harvesting systems, and other types of low impact development (LID).
- **Policy PFS-3.4** Retrofit for Green Infrastructure. Encourage the retrofit of existing development to include sustainable infrastructure and green building practices.

With implementation of the policies mentioned above and LID techniques, sufficient stormwater collection would be maintained. As such, new or expanded facilities are not anticipated to be required due to operational demand. Therefore, 2040 General Plan operational impacts related to adequacy, capacity, and need for new stormwater infrastructure facilities as a result of stormwater generation would be less than significant.

TELECOMMUNICATIONS

At operation, the 2040 General Plan would increase demand for internet and telephone services provided by local telecommunications providers. The library, park district, and future residents would coordinate with telecommunication providers to provide service. The plan area is located in an urbanized area of Pleasant Hill where existing telecommunications providers already offer internet and telephone services. As such, at operation the proposed plan would not require the relocation or expansion of telecommunications infrastructure, due to local telecommunications providers continuing to provide adequate telecommunications capacity and access.

In addition, the 2040 General Plan contains the following goals and policies that would ensure adequate telecommunication capacity and infrastructure:

- Goal PFS-5 Provide for the current and future energy and telecommunications needs of Pleasant Hill.
 - **Policy PFS-5.1 Provision of Utilities.** Work with public, quasi-public, and private utility providers as practicable to provide adequate levels of service to city residents.
 - **Policy PFS-5.2** Coordination with Utility Providers. Coordinate with energy providers in the siting and design of gas and electric facilities to minimize environmental, aesthetic, and safety impacts.
 - **Policy PFS-5.3** Co-Location of Telecommunication Facilities. Encourage compatible colocation of telecommunication facilities and work with service providers to site telecommunications facilities on City-owned property or public rights-ofway.
 - **Policy PFS-5.4 Utility Undergrounding.** Require the undergrounding of local-serving utilities in areas of the city undergoing development or significant construction.

Policy PFS-5.5 Telecommunication Technologies. Support the implementation of telecommunication technologies to attract new businesses and meet the changing communication needs of city residents and businesses.

Policy PFS-5.6 Fiber Optic Cable Access. Explore opportunities to expand the city's fiber optic infrastructure.

Policy PFS-5.7 Residential Electric Utility Use. Encourage the use of electric appliances and utility hook-ups in all new residential development.

With implementation of the policies mentioned above, sufficient telecommunications access would be maintained. As such, new or expanded facilities are not anticipated to be required due to operational demand. Therefore, 2040 General Plan operational impacts related to access, capacity, and need for new telecommunications infrastructure facilities as a result of telecommunications demand would be less than significant.

Mitigation Measures

MITIGATION MEASURE AQ-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO REDUCE CONSTRUCTION CRITERIA POLLUTANT EMISSIONS (SEE SECTION 3.2, AIR QUALITY, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE AQ-3: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO CONDUCT AND IMPLEMENT CONSTRUCTION HEALTH RISK ASSESSMENTS (SEE SECTION 3.2, AIR QUALITY, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-1:

REVISE GENERAL PLAN IMPLEMENTATION PROGRAM M TO INCLUDE PREPARATION OF HISTORICAL RESOURCES EVALUATION PRIOR TO APPROVAL FOR PROJECTS INVOLVING BUILDINGS 45 YEARS OR OLDER AND IMPLEMENTATION OF MITIGATION PRIOR TO AND DURING CONSTRUCTION (SEE SECTION 3.4, CULTURAL AND TRIBAL CULTURAL RESOURCES, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-2: REVISED GENERAL PLAN IMPLEMENTATION PROGRAM M TO INCLUDE PREPARATION OF ARCHAEOLOGICAL RESOURCES ASSESSMENT PRIOR TO PROJECT APPROVAL AND IMPLEMENTATION OF MITIGATION PRIOR TO AND DURING CONSTRUCTION (SEE SECTION 3.10, Noise, For Full MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-3: REVISE GENERAL PLAN GOAL ENV-5 TO INCLUDE A POLICY TO STOP WORK IN THE EVENT OF UNANTICIPATED CULTURAL RESOURCES DISCOVERIES DURING CONSTRUCTION (SEE SECTION 3.10, Noise, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE CR-4: REVISE GENERAL PLAN GOAL ENV-5 TO INCLUDE A POLICY TO SUSPEND WORK AROUND TRIBAL CULTURAL RESOURCES IDENTIFIED DURING CONSTRUCTION (SEE SECTION 3.4, CULTURAL AND TRIBAL CULTURAL RESOURCES, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE GEO-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO PROTECT PALEONTOLOGICAL RESOURCES (SEE SECTION 3.5, GEOLOGY, SOILS, AND MINERAL RESOURCES, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE NOI-1: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO

IMPLEMENT CONSTRUCTION NOISE REDUCTION MEASURES (SEE SECTION 3.10, Noise, FOR FULL MITIGATION MEASURE TEXT)

MITIGATION MEASURE NOI-2: ADOPT AND IMPLEMENT A NEW GENERAL PLAN POLICY TO

IMPLEMENT A CONSTRUCTION VIBRATION CONTROL PLAN (SEE SECTION 3.10, Noise, FOR FULL MITIGATION MEASURE TEXT)

Level of Significance Significant and unavoidable

Water Supply Availability

Significance Criterion b: Would the proposed plan have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact UTL-2 DEVELOPMENT FACILITATED BY THE 2040 GENERAL PLAN WOULD INCREASE DEMAND FOR WATER SUPPLY. HOWEVER, WITH ADHERENCE TO THE 2040 GENERAL PLAN GOALS AND POLICIES, WATER SUPPLIES WOULD BE ADEQUATE TO SUPPORT FUTURE DEVELOPMENT. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

While construction under the 2040 General Plan could necessitate the occasional use of minimal. limited quantity of water for dust control, mixing concrete, and washing equipment and vehicles, impacts related to water supplies are primarily limited to operational impacts. Therefore, 2040 General Plan construction impacts related to need for new water supply as a result of water demand would be less than significant.

Operation

The UWMPs for both CCWD and EBMUD determined there are sufficient water supplies to accommodate anticipated regional population growth throughout their service areas according to the ABAG Plan Bay Area 2040 projections. 31,32 Similarly, the UWMPs for the plan area assess water supply reliability for planned growth based upon ABAG 2040 projections and determined that sufficient water supply is available under normal-year, single-dry-year, but may have supply shortfalls in the later years of multiple-dry-year conditions. ^{33,34} However, as discussed in Section 3.9, Land Use Planning, Population, and Housing, development facilitated by the 2040 General Plan could result in an increase in population that would exceed such ABAG population forecasts by 122 percent by 2040. As such, the proposed plan could result in insufficient water supplies to serve the proposed plan buildout in 2040.

³¹ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan – Table 1-1, CCWD Service Area Population. https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF. (accessed December 2022). 32 East Bay Municipal Utility District (EBMUD). 2020. Urban Water Management Plan – Table 1-3, Population Projections.

https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan. (accessed December 2022). 33 Contra Costa Water District (CCWD). 2020. Urban Water Management Plan – Table 1-4, Projected Water Supply.

https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF. (accessed December 2022). 34 East Bay Municipal Utility District (EBMUD). 2020. Urban Water Management Plan – Table W-3, Supply & Demand Assessment, 2020-

^{2050.} https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan. (accessed December 2022).

Both the CCWD and EBMUD UWMPs include measures to implement during periods of water shortages. The CCWD UWMP includes a Water Shortage Contingency Plan (WSCP) that outlines actions CCWD would take for managing water during water supply shortage conditions. These options have been developed based on CCWD's previous experience with short-term demand management, including the recent droughts, and in consideration of long-term conservation goals. Similarly, the EBMUD WSCP includes existing and planned efforts to support meeting long-term water conservation planning goals to the year 2050. It presents a phased implementation of conservation measures based on threshold water production and customer demand levels designed to achieve a cumulative 70 million gallons per day (MGD) of water savings by 2050.³⁵

Operation of net new residential and non-residential land use built out under the 2040 General Plan would increase the demand for water for both CCWD and EBMUD. As discussed within Section 2, *Project Description*, maximum buildout of the 2040 General Plan represents development within city limits. As shown in Figure 3.13-2, there are only two water service providers within City Limits, CCWD and EBMUD, with CCWD being the primary service provider to a majority of Pleasant Hill. Therefore, the analysis herein conservatively evaluates the proposed plan's impacts solely on CCWD water supply. ³⁶ The CCWD 2020 UWMP sets forth 142 gallons per capita daily (gpcd) as the TWSA average water consumption rate. As discussed within Section 3.9, *Land Use Planning, Population, and Housing*, at maximum buildout the 2040 General Plan could facilitate the addition of approximately 46,119 net new residents in Pleasant Hill from 2022 to 2040. Multiplying the 145 gcpd by approximately 46,119 persons yields a daily water consumption value of 6,687,255 gallons which equates to 7,491 acre-feet per year (AFY) of water demand for the project.

Based on the population projections presented above and CCWD existing and planned conservation measures, the water demand projections for the TWSA and total UWMP Service Area through 2045 are shown in Table 3.13-2. As shown therein, total demand for the TWSA and UWMP Service Area through the year 2040 is approximately 40,100 AFY and 171,600 AFY, respectively. The 2040 General Plan would account for roughly 7,491 AFY or 18 percent of the total TWSA total demand in 2040. Furthermore, buildout of the 2040 General Plan would account for approximately four percent of the total UWMP Service Area demand in 2040.

³⁵ East Bay Municipal Utility District (EBMUD). 2020. Water Shortage Contingency Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan. (accessed November 2022).

³⁶ This approach is conservative, as the other water service provider (EBMUD) covering a portion of Pleasant Hill would also be available to provide water supply within Pleasant Hill.

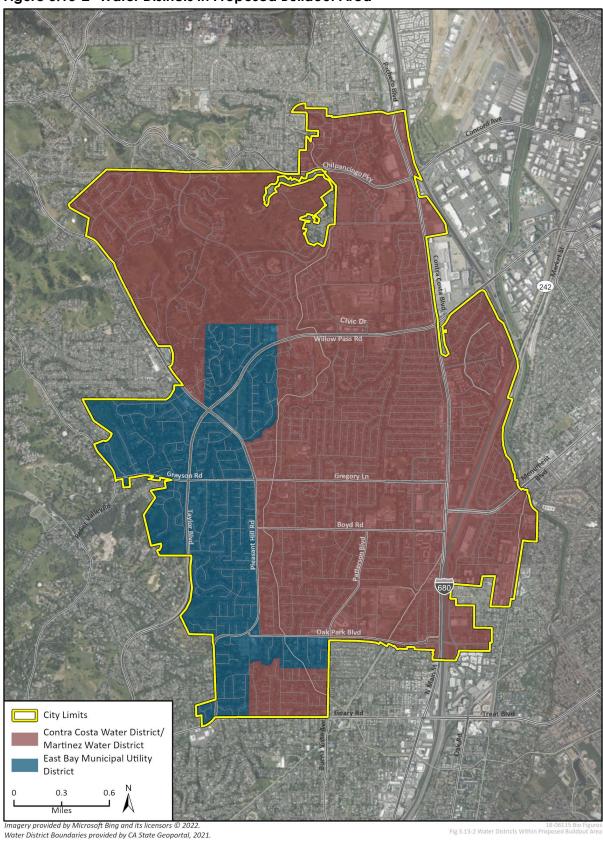


Figure 3.13-2 Water Districts in Proposed Buildout Area

Table 3.13-2 CCWD Current and Projected Water Demand

Year	2020	2025²	2030 ²	2035²	2040 ²	2045²
Total TWSA Demand ¹ (AFY)	32,600	36,400	37,400	38,800	40,100	40,900
Total UWMP Service Area Demand (AFY)	126,320	147,400	157,300	165,000	171,600	175,900

AFY = acre-feet per year

Source: CCWD 2020³⁷

The CCWD 2020 UWMP also anticipates the existing and planned sources of water available in five-year increments though the General Plan planning horizon year 2040, as shown in Table 3.13-3, as well as the projected availability of these water supplies in average, single-dry, and multiple-dry water year conditions. An average water year is a year that most closely represents the average water supply available to the agency. A single-dry year is defined as the year that represents the lowest water supply available to the agency. A multiple-dry year period is defined as the period that represents the lowest average water supply availability for five consecutive dry years.

Table 3.13-3 CCWD Projected Water Supply Demand for 2040

Water Year Type	CVP ² (AFY)	Total Planned Supply (AFY)
Average	185,250	242,200
Single-Dry	136,500	194,350
Multi-Dry Year 1	146,250	197,100
Multi-Dry Year 3	117,000	166,570
Multi-Dry Year 5	97,500	147,170

AFY = acre-feet per year

Source: CCWD 2020³⁸

As shown above in Table 3.13-3, CCWD does not anticipate supply deficits in normal years or single-dry years throughout the planning horizon but may have supply shortfalls in future years of up to 14 percent of demand in the later years of a multi-dry year conditions. Potential supply shortfalls experienced during dry year conditions would be met through a combination of a short-term conservation program and/or short-term water purchases, consistent with the District's Future Water Supply Study.³⁹

 $^{^{\}rm 1}$ TWSA demands include treated water distribution system losses.

² Future demand projections are based on maximum dry-year demands not impacted by drought-related water shortage or economic conditions. Additionally, projected demands consider anticipated water use efficiency and conservation measures which result in reduced demands.

¹ Average (Normal) represents availability of water supply in wet, above normal, below normal and normal years. Single-Dry Year represents availability of water supply in dry and critically dry years. Multiple-Dry Year sequence represents a five-year drought such as 1929-1933 conditions.

² Central Valley Project contract which provides for a maximum delivery of 195,000 AFY of CVP supply.

 ³⁷ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan – Table 1-3, Current and Projected Water Demand. https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF. (accessed December 2022).
 ³⁸ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan – Table 1-4, Projected Water Supply. https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF. (accessed December 2022).
 ³⁹ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan – Water Supply Reliability Assessment. https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF. (accessed December 2022).

As shown Table 3.13-2 and Table 3.13-3, water supply associated with the 2040 General Plan would be met by CCWD supply in average and single-dry years but could result in additional demand on CCWD water supply in multi-dry year conditions. However, CCWD anticipates meeting future demands through continued use of its Central Valley Project (CVP) contract, its own water rights, and balanced investments in conservation, recycled water, and water transfers. The CVP is CCWD's primary water source obtained under contract that provides for a maximum delivery of 195,000 AFY of CVP supply.

Furthermore, water supply shortfalls would be met by CCWD water conservation measures as outlined in the CCWD WSCP, which includes conservation surveys, rebate incentives, and education and outreach. 40 Within these broad categories, the programs and services are further tailored for residential, commercial, industrial, and large landscape water uses. CCWD continually evaluates its existing and potential conservation programs and services to determine the best combination of programs that meet criteria such as water savings potential, certainty of water savings, customer receptivity, market potential, and cost-effectiveness.

In addition to CCWD WSCP conservation measures, the 2040 General Plan includes the following goals and policies that would help reduce impacts on water supplies and encourage the conservation of water:

Goal HA-4 Minimize the effects of drought by creating an emphasis of routine water conservation.

- **Policy HS-4.1 Municipal Water Conservation.** Continue to identify opportunities to upgrade City facilities with water-conserving appliances and using reclaimed water for irrigation, landscaping, and other allowable uses.
- **Policy HS-4.2** Residential Water Conservation. Implement and maintain cost-effective, citywide water conservation and efficiency programs for all customers through education, rebates, assistance programs, and building requirements.
- **Policy HS-4.3** Water Conservation Measures. Reduce the amount of water used by development by requiring compliance with adopted water conservation measures.

Goal ENV-1.3 Provide an adequate water supply for residential, business, and other uses needed to support the existing and projected city population.

- Policy ENV-1.3 Commercial and Business Water Conservation. Require new or remodeled commercial and industrial development to make changes that conserve water, to the extent feasible. This could include utilizing efficient plumbing fixtures, installing drought-tolerant and water-wise landscaping, and harvesting rainwater for irrigation.
- **Policy ENV-1.4 Municipal Water Conservation.** Require, where feasible, that City facilities install efficient plumbing fixtures in new construction or renovations, replacing inefficient plumbing fixtures, and installing drought-tolerant and water-wise landscaping to conserve water.

⁴⁰ Contra Costa Water District (CCWD). 2020. Urban Water Management Plan – Water Shortage Contingency Planning. https://www.ccwater.com/DocumentCenter/View/9851/2020-Urban-Water-Management-Plan-PDF. (accessed December 2022).

Policy ENV-1.5 Water Conservation in Public Facilities. During construction or renovation of public facilities, institute water conservation measures such as hot-on-demand water faucets, low flush toilets, and low water using appliances.

Thus, while the development facilitated by the proposed plan would result in additional population beyond the projected population within Plan Bay Area 2040 and the CCWD and EBMUD UWMPs, current water supplies and adherence to the 2040 General Plan policies would be adequate to meet 2040 General Plan per capita water demand. Furthermore, the proposed General Plan would account for 18 percent of the total TWSA demand and 4 percent of the total CCWD UWMP Service Area water demand in the year 2040 which is not a significant demand on the service system. Water supply for the 2040 General Plan would be met in average and single-dry years but could result in shortfalls in multi-dry year conditions. Additional demand would be met by the CCWD CVP and water conservation measures as outlined in CCWD WSCP which includes conservation surveys, rebate incentives, and education and outreach. ⁴¹ Therefore, with implementation of the aforementioned policies and requirement for future development of certain minimum size to prepare water supply assessments, 2040 General Plan impacts related to sufficient water supplies would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Wastewater Treatment Capacity

Significance Criterion c: Would the proposed plan 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?

Impact UTL-3 DEVELOPMENT PROJECTED BY THE PROPOSED PLAN WOULD INCREASE DEMAND FOR WASTEWATER TREATMENT. HOWEVER, THE EXISTING WASTEWATER TREATMENT PLANT HAS SUFFICIENT CAPACITY FOR FUTURE DEVELOPMENT, AND THE 2040 GENERAL PLAN CONTAINS POLICIES TO ENSURE TREATMENT IS ADEQUATE. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Impacts related to adequate wastewater treatment capacity are limited to operational impacts. No respective construction impacts would occur.

⁴¹ In addition, future plans and projects facilitated by the 2040 General Plan that meet certain criteria under Senate Bill 610 will be required to prepare a project-level water supply assessment, which identifies and verifies water supply availability under normal water year conditions, single dry year conditions, and multiple dry year conditions.

Operation

Implementation of the proposed plan could have a significant impact if the wastewater treatment provider would not have sufficient capacity to serve the proposed new land uses in addition to the provider's existing commitments.

Growth and development facilitated by the 2040 General Plan would create additional demand for wastewater treatment in Pleasant Hill. As discussed within Section 3.9, Land Use/Planning and Population/Housing, this additional housing, coupled with ongoing and planned development, would lead to a population growth of approximately 46,119 new residents by 2040. Under full buildout of the General Plan, this equates to an approximately 80,145 new residents by the year 2040. Because development facilitated by the 2040 General Plan would occur within the urbanized areas of the City, existing wastewater infrastructure exists.

Wastewater collected within Pleasant Hill is treated at the Central San WWTP, which has a treatment capacity of 54 million gpd and treats an average of 35.6 million gallons of wastewater per day. 42 On average, the WWTP processes approximately 32 million gallons of wastewater each day during the dry season and can see peak flows as high as an estimated 230 million gallons per day during an extreme winter storm. According to the 2020 EBMUD UWMP, Central San collected and treated 35 mgd of wastewater in 2020 and this number is expected to increase to 41.8 mgd by 2045. 43 Both the 2020 wastewater levels, as well as the 2045 projects water levels are within the treatment plant's overall capacity of 54 mgd. Central San has developed the following wastewater loading criteria for different types of land uses: 44

- 180 gallons per dwelling unit per day (gpd) for single family dwelling units
- 105 gpd for multiple family dwelling units

Using the unit loading criteria for single family and multiple family dwelling units, development facilitated by the General Plan would generate approximately 1,287,000 gpd and 1,266,930 gpd of wastewater, respectively. The proposed plan would result in approximately 2,553,930 gpd or approximately 2.1 mgd, which would constitute approximately 11 percent of the remaining capacity (19 mgd)⁴⁵ of the wastewater treatment plant.⁴⁶ Furthermore, in 2045 the projected wastewater demand, including the General Plan would be 42.0⁴⁷, which would be within the capacity of the treatment plan. Therefore, Central San's treatment plant would have sufficient capacity to accommodate wastewater generated by the General Plan.

Additionally, Central San has prepared and is implementing a 10-year Capital Improvement Program (CIP) which serves to expand, upgrade, and replace its treatment plant and collection system. Central San has included a Collection System Program which aims to renovate aging sewers and to serve new development in Central San's service area. Specific near-term and long-term goals include addressing capacity needs by upsizing sewers to increase capacity, improving the reliability of Central San's pumping stations, and implementing projects to address renovation needs. Projects

⁴² Central Contra Costa Sanitary District (Central San). 2022. Central San Treatment Plant. https://www.centralsan.org/treatment-plant. (accessed November 2022).

⁴³ East Bay Municipal Utility District (EBMUD). 2021. Urban Water Management Plan 2020. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/. (accessed November 2022).

⁴⁴ Central Contra Costa Sanitary District (Central San). 2017. Comprehensive Wastewater Master Plan Technical Executive Summary. https://www.centralsan.org/sites/main/files/file-attachments/cwmp_technical_executive_summary.pdf?1510867241. (accessed November 2022).

 $^{^{45}}$ 19 mgd = 54 mgd (capacity) – 35 mgd (wastewater treatment in 2020).

⁴⁶ 11 percent = [2.1 mgd (General Plan wastewater demand) / 19 mgd (remaining capacity in 2020)] * 100 percent

⁴⁷ 42.0 mgd = 41.8 mgd (projected wastewater demand in 2045) + 0.2 mgd (Housing Element wastewater demand)

under the Collection System Program would reduce the likelihood of sewage overflows during dry and wet weather. 48 Implementation of Central San's 10-year CIP and the existing WWTP's capacity would ensure adequate wastewater treatment capacity for future development under the proposed plan. Therefore, 2040 General Plan operational impacts related to sufficient water treatment capacity would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

Landfill Capacity and Solid Waste Reduction Regulations Consistency

Significance Criterion d: Would the proposed plan 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?

Significance Criterion e: Would the proposed plan comply with federal, State, and local

management and reduction statutes and regulations related to solid

waste?

Impact UTL-4 DEVELOPMENT FACILITATED UNDER THE 2040 GENERAL PLAN WOULD INCREASE THE VOLUME OF SOLID WASTE GENERATED IN PLEASANT HILL. HOWEVER, EXISTING INFRASTRUCTURE THAT SERVES THE CITY, AS WELL AS POLICIES WITHIN THE 2040 GENERAL PLAN, WOULD ENSURE THAT THE CITY HAS ADEQUATE CAPACITY TO ACCEPT THE INCREASE IN SOLID WASTE AND COMPLY WITH FEDERAL, STATE, AND LOCAL MANAGEMENT REDUCTION REGULATIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction

Construction facilitated by the 2040 General Plan would involve the development of existing buildings, surface parking lots, and landscaping. This would result in the generation of solid waste from demolition and on-site construction activities. Future projects developed under the proposed plan that would entail construction and generate solid waste would subject to Pleasant Hill Municipal Code Chapter 14.40 to ensure that construction-generated solid waste is not in excess of State or local standards or the capacity of local landfills, or otherwise impair the attainment of solid waste reduction goals. Additionally, the proposed General Plan includes Policy PFS-4.3 which requires the recycling and reuse of building materials during demolition and construction. Therefore, construction impacts related to landfill capacity and solid waste reduction goals consistency would be less than significant.

Operation

Development facilitated by the proposed plan could result in the addition of up to 46,119 new residents and 19,216 residential units throughout Pleasant Hill by the year 2040. Based on a solid

⁴⁸ Central Contra Costa Sanitary District (Central San). 2015. FY 2015-2016 Capital Improvement Budget and Ten-Year Plan. https://www.centralsan.org/sites/main/files/file-attachments/2015_16_cib.pdf?1510722971 (accessed November 2022).

waste generation rate of 5.31 pounds per dwelling unit per year, ⁴⁹ the proposed plan would generate an estimated 102,037 pounds per day or about 37 million pounds per year (or 18,500 tons per year). According to CalRecycle, the Keller Canyon Landfill has a maximum throughput of approximately 3,500 tons per day and anticipated closure date of December 31, 2050. ⁵⁰ The proposed plan would yield an annual solid waste generation of approximately 102,037 pounds per day, which would account for approximately 1.4 percent of the throughput of the Keller Canyon Landfill. In addition to the Keller Canyon Landfill, solid waste could also be transferred to the Acme Landfill which has a remaining capacity of approximately 506,590 cubic yards and could divert a portion of the solid waste from the plan area. ⁵¹ Therefore, development facilitated by the 2040 General Plan would not generate solid waste in excess of the capacity of local solid waste infrastructure.

In addition, the 2040 General Plan contains the following goal and associated policies to address solid waste generation and disposal within Pleasant Hill.

Goal PFS-4 Continue and improve upon efforts to divert waste from landfills.

- **Policy PFS-4.1** Sustainable Solid Waste and Recycling Services. Work with contract service provider to advance their sustainability initiatives to increase recovery of key materials and development of regenerative landfills.
- **Policy PFS-4.2 Waste Reduction Education.** Collaborate and partner with local organizations to provide waste reduction education programs to residents and businesses.
- **Policy PFS-4.3** Recycle and Reuse Building Materials. Require the recycling and reuse of building materials during demolition and construction including roadway projects.

Development facilitated by the proposed plan would be required to comply with these policies, including paying a fair share for solid waste services and achieving greater diversion rates than required by AB 939. Pursuant to AB 939 the City must divert 50 percent of solid waste from landfills. Local infrastructure and Republic Services would have the capacity to accommodate and collect solid waste generated by the proposed plan. Development facilitated by the proposed plan would also be required to demonstrate compliance with all applicable federal, State, and local regulations related to management and reduction of solid waste, including related to recycling and composting (e.g., California Senate Bill 1383). Therefore, the 2040 General Plan impact related to local solid waste infrastructure capacity and solid waste management and reduction regulations consistency would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance

Less than significant without mitigation

⁴⁹ CalRecycle. 2019. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed November 2022)

^{50 50} CalRecycle. 2019 SWIS Facility/Site Activity Details Keller Canyon Landfill (07-AA-0032).

https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4407?siteID=228. (accessed November 2022).

⁵¹ CalRecycle. 2019 SWIS Facility/Site Activity Details Acme Landfill (07-AA-0002).

https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/4396?siteID=217. (accessed November 2022).

3.13.5 Cumulative Impacts

The geographic scope of the cumulative utilities and service systems analysis is the CCWD, EBMUD, Central San, Pleasant Hill Public Works, and Republic Services service areas. Because of differences in the nature of the utility and service system topical areas, they are discussed separately. The cumulative analysis considers the nearby past, present, and reasonably foreseeable future plans and projects listed in Table 3-1 (refer to Chapter 3, *Environmental Impact Analysis*) located in Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County, and Plan Bay Area 2050.

Water Supply Infrastructure and Facilities

CCWD and EBMUD provide potable water to residents and businesses within the Contra Costa and the East Bay, including Pleasant Hill. Both CCWD and EBMUD considered the existing capacity and future demand for capacity to determine needed updates to water facilities. In the course of preparing the UWMP, both providers estimated water demand of future development in the service area and forecast the needed facility upgrades. The forecast included supply facility upgrades needed to accommodate growth in the service area, including Pleasant Hill. The CCWD and EBMUD prepared UWMPs that considered the buildout potential across the service area. The UWMPs determined that the CCWD and EBMUD would be able to provide adequate water supplies to the City during normal years and single dry years but would see shortfalls during multiple dry years which would be offset through planned water supply purchases. However, while the development facilitated by the proposed plan would result in additional population beyond the projected population within Plan Bay Area 2040, adherence to the General Plan policies would reduce per capita water use. In addition, future developments that meet certain criteria under Senate Bill 610 will be required to prepare a project-level water supply assessment, which identifies and verifies water supply availability under normal water year conditions, single dry year conditions, and multiple dry year conditions. Furthermore, cumulative plans and projects listed in Table 3-1 would be required to comply with provisions of the respective municipal codes and California Green Building Code related to water conservation. However, as discussed above, there is potential that infrastructure upgrades may be required to accommodate future growth. Therefore, the cumulative impacts related to water supply infrastructure expansion and construction would be significant and unavoidable.

Wastewater Infrastructure and Facilities

Central San provides wastewater collection and treatment services for the residents and business in Pleasant Hill. Central San recently updated its Sewer System Management Plan which, the purpose of which is to reduce sanitary sewer overflows (SSOs) in the City's sanitary sewer collection system and to enhance compliance with the applicable permits, laws, and regulations as related to sanitary sewer overflows. The plan includes treatment facility upgrades needed to accommodate growth in the service area and maintain compliance with applicable regulatory standards for wastewater treatment and discharge. Cumulative plans and projects would generate volumes of wastewater. The Cities of Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County anticipate development in the respective cities and determined that capacity would exist to service the demand for wastewater treatment facilities. However, as discussed above, there is potential that infrastructure upgrades may be required to accommodate future growth. Therefore, the cumulative impacts related to wastewater infrastructure expansion and construction would be significant and unavoidable.

Stormwater Infrastructure and Facilities

Cumulative plans and projects predominantly consist of residential and commercial uses. The cumulative plans and projects would be located in urban areas that would be served by existing municipal storm drainage systems. Consistent with measures in the Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and Contra Costa County Municipal Codes, development in the cities would incorporate a stormwater control plan and stormwater collection systems into the development that would in turn reduce the volume and velocity of stormwater runoff that cumulative development would generate. Therefore, the cumulative impact related to stormwater infrastructure and facilities would be less than significant.

Solid Waste Facilities

Keller Canyon and Acme Landfills operate solid waste landfills and oversee regional waste diversion programs as well as solid waste and recycling collection services. Keller Canyon anticipates it would be able to absorb future growth. Cumulative plans and projects listed consist predominantly of residential and commercial uses. However, as with the surrounding areas, new cumulative development (residential and non-residential) would increase demand on solid waste facilities to receive, process, and store solid waste. The Keller Canyon Landfill has a maximum throughput of approximately 3,500 tons per day and anticipated closure date of December 31, 2050. The anticipated waste volume of development in the plan area represents approximately 1.4 percent of the throughput of the Keller Canyon Landfill. Existing solid waste facilities provide sufficient capacity to serve development anticipated in the Cities of Lafayette, Martinez, Clayton, Danville, Orinda, Pittsburg, Moraga, and unincorporated Contra Costa County as well as existing, planned, and probable future land uses in the respective cities for the foreseeable future. Therefore, the cumulative impact related to solid waste facilities would be less than significant.

Overall Level of Cumulative Significance

Less than significant

Pleasant Hill 2040 General Plan		
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City of Pleasant Hill

4 Other CEQA Sections

This chapter discusses growth-inducing impacts and irreversible environmental impacts that would be caused by the proposed plan.

4.1 Growth Inducing Impacts

There are two types of growth-inducing impacts that a plan or project may have: direct and indirect. To assess the potential for growth-inducing impacts, the proposed plan's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated. CEQA Guidelines Section 15126.2(d) requires a discussion of a proposed plan or project's potential to foster economic or population growth, including ways in which a plan could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The CEQA Guidelines, as interpreted by the City, state that a significant growth-inducing impact may result if the proposed plan would:

- Induce substantial population growth in an area (for example, by proposing or facilitating new residences or employment-generating uses beyond the land use density/intensity envisioned in the general plan);
- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list, when such infrastructure exceeds the needs of a project and could accommodate unplanned future development.

Direct growth-inducing impacts occur when the implementation of a plan or project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area. Also included in this category are plans or projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure cannot be considered isolated from the development they facilitate and serve. Plans or projects that physically remove obstacles to growth, or projects that indirectly induce growth, may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

4.1.1 Population and Employment Growth

As discussed in Section 3.9, Land Use/Planning and Population/Housing, the buildout anticipated under the 2040 General Plan could accommodate an estimated 46,119 new residents and 19,216 new dwelling units in Pleasant Hill. With the estimated growth under the 2040 General Plan, Pleasant Hill would have a 2040 population of 80,145. Additionally, ABAG estimates that Pleasant Hill would have an additional 2,200 jobs by 2040 for a total of 19,800 within the City. Note that growth assumptions within this EIR are conservative and unlikely to come to complete fruition. Additionally, future ABAG forecasts may provide more realistic growth assumptions, which would be lower than the growth presented here.

It is anticipated that buildout under the proposed plan would directly support the population growth and subsequent housing needs within Pleasant Hill's projected growth estimates. Since much of Pleasant Hill is currently developed and used for residential, commercial, and various other uses, implementation of the proposed plan would largely entail the development of vacant and underutilized parcels throughout Pleasant Hill. As discussed under Impact LU-1 and LU-2, the proposed plan aims to intensify and densify development within the 2040 General Plan area to accommodate anticipated population growth and housing needs within Pleasant Hill. Proposed 2040 General Plan land use and planning policies aim to provide guidance for orderly development while balancing the land use needs for housing, residential and commercial services, civic needs, and jobs.

It is the specific purpose of the proposed plan to guide growth and development in Pleasant Hill such that infill development would be prioritized, and open space areas would be preserved and enhanced. Therefore, by its nature, the proposed plan is intended to reduce the potential for uncontrolled growth and associated environmental impacts. For the reasons discussed above, implementation of the proposed plan would not lead to direct or indirect growth impacts beyond what is anticipated and planned for by Pleasant Hill.

4.1.2 Removal of Obstacles to Growth

As discussed under Impact LU-1 and LU-2 in Section 3.9, Land Use/Planning and Population/Housing, much of Pleasant Hill is developed, and the proposed plan encourages infill development to meet Pleasant Hill's anticipated population and employment growth and housing needs. Although development of some vacant land within Pleasant Hill would require new utility connections, new development would occur where existing roads, water, parking lots, and sewer and other utilities are in place and in a manner that minimizes the impact of development on existing infrastructure and services. Major infrastructure extensions are not envisioned due to the level of existing development within Pleasant Hill, and improvements would be primarily limited to the replacement and/or upgrade of aging facilities and enhancement of existing infrastructure as needed on a future project-by-project basis. All new development envisioned as part of the 2040 General Plan would occur within City limits. Therefore, because new development would use existing facilities and major infrastructure extensions would not occur, the proposed plan would not remove obstacles to unplanned growth within Pleasant Hill.

4.2 Irreversible Environmental Effects

CEQA Guidelines Section 15126(c) requires that EIRs evaluating plans and projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decision-makers to balance the benefits of a proposed plan or project against its unavoidable environmental risks in determining whether to approve a plan or project. This section addresses the use of non-renewable resources, the commitment of future generations to the proposed development and land use changes, and irreversible impacts associated with the development that would be facilitated by implementation of the 2040 General Plan.

Construction activity associated with planned development accommodated under the proposed plan would include the use of building materials and energy, some of which would be non-renewable resources. Consumption of these resources would occur with any development in the Bay Area region and are not unique to Pleasant Hill or the proposed plan. The addition of new

residential and non-residential development in the Pleasant Hill through 2040 would irreversibly increase local demand for non-renewable energy resources such as petroleum and natural gas. Increasingly efficient building fixtures and automobile engines, as well as implementation of policies included in the 2040 General Plan, are expected to offset the demand for non-renewable energy to some degree. Growth resulting from implementation of the proposed plan is not anticipated to significantly affect local or regional energy supplies; and project impacts related to energy consumption are further evaluated in Section 3.6, *Greenhouse Gas Emissions and Energy*.

Growth facilitated by the proposed plan would require an irreversible commitment of City services, water supply, and wastewater treatment. As discussed in Section 3.12, *Public Services and Recreation*, and Section 3.13, *Utilities and Service Systems*, impacts to public services and utilities would be remain significant and unavoidable as they relate to construction of schools.

Growth associated with the 2040 General Plan through 2040 would incrementally increase local vehicle miles traveled (VMT), noise levels, and regional air pollutant and greenhouse gas (GHG) emissions. As discussed in Section 3.2, *Air Quality*, and Section 3.6, *Greenhouse Gas Emissions and Energy*, implementation of the proposed plan policies, regional air pollution programs, and mitigation measures would reduce the air pollutant and GHG emissions associated with individual future development projects; however, air quality pollutants and GHG emissions would not be reduced to below significant thresholds. As discussed in Section 3.4, *Cultural and Tribal Cultural Resources*, implementation of the proposed plan policies, historical resources regulations, and mitigation measures would not be reduced to below significant thresholds.

As discussed in Section 3.10, *Noise*, implementation of proposed policies and mitigation measures would reduce the noise impacts associated with future growth but not to a less-than-significant level. As discussed in Section 3.12, *Transportation*, the policies in the proposed plan and mitigation measures would reduce many transportation impacts to a less-than-significant level; however, population growth facilitated by the proposed plan combined with regional population growth would result in additional vehicle trips on area roadways, resulting in significant and unavoidable traffic impacts on several roadways.

4.3 Mandatory Findings of Significance

Per CEQA Guidelines Appendix G Section XVIII, the following mandatory findings of significance analysis is provided.

a. Does the proposed plan have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The 2040 General Plan would not facilitate development that would eliminate or threaten wildlife habitats. Therefore, as discussed in more detail in Section 3.3, *Biological, Agricultural, and Forestry Resources*, the 2040 General Plan would result in less-than-significant-with-mitigation impacts related to wildlife habitats. However, the 2040 General Plan could potentially eliminate important examples of the major periods of California history or prehistory. Therefore, as discussed in more detail in Section 3.4, *Cultural and Tribal Cultural Resources*, the 2040 General Plan would result in a significant and unavoidable impact related to cultural resources, specifically historical resources.

b. Does the proposed plan have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

While the proposed 2040 General Plan policies encourage residents, businesses, and the City to reduce energy, fuel use, water use, VMT, and solid waste generation and the associated GHG emissions, the proposed plan would still result in significant and unavoidable impacts related to VMT and GHG emissions. In addition, as discussed throughout the respective cumulative impacts discussions within this EIR, the 2040 General Plan would also result in significant cumulative impacts for the similar topics. Therefore, the 2040 General Plan would result in an overall significant and unavoidable cumulative impact related to all CEQA topics addressed within this EIR.

c. Does the proposed plan have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The 2040 General Plan would result in adverse effects on human beings. As discussed in more detail in Sections 3.2, *Air Quality*, 3.6, *Greenhouse Gas Emissions and Energy*, 3.7, *Hazards, Hazardous Materials, and Wildfire*, 3.10, *Noise*, and 3.13, *Transportation*, implementation of the 2040 General Plan could result in impacts related to transportation, air quality, GHG emission, noise, and hazards that could, in turn, affect human beings. Therefore, the 2040 General Plan would result in an overall significant and unavoidable impact related to potential for adverse effects on human beings.

5 EIR Alternatives

5.1 Introduction

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this chapter contains a comparative impact assessment of alternatives to the 2040 General Plan (proposed plan). The primary purpose of an alternatives analysis under CEQA is to provide decision-makers and the public with a reasonable range of feasible alternatives to the proposed plan that could attain most of the basic plan's objectives, while avoiding or reducing any of the plan's significant adverse environmental effects.

Analysis of three alternatives to the proposed plan is provided for informational purposes and to allow decision-makers to consider the proposed plan in light of hypothetical alternative planning scenarios, thereby promoting CEQA's purpose as an information disclosure statute. This analysis is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a plan or project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic plan or project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental effects.

5.2 Significant and Unavoidable Impacts

The implementation of the proposed plan was analyzed for potentially significant impacts related to each of the environmental issues discussed in Sections 3.1 through 3.13. The results of the analysis indicate that the proposed plan would result in the following significant and unavoidable impacts:

- <u>Cultural and Tribal Cultural Resources:</u> construction-related historical resources
- GHG Emissions and Energy: operation-related GHG emissions and consistency with GHG reduction plans
- Hazard, Hazardous Materials, and Wildfire: operation-related wildfire exposure risk and emergency response/evacuation plans consistency
- Noise: construction-related noise and operation-related mobile (roadway vehicle) noise
- Public Services and Recreation: construction-related new and expanded schools
- <u>Transportation:</u> operation-related VMT
- <u>Utilities and Service Systems:</u> construction- and operational-related new and expanded utilities facilities/infrastructure

Mitigation measures (MMs) were identified for construction-related historic resources, noise, and new and expanded schools and utilities facilities/infrastructure impacts and for operational-related GHG emissions/GHG reduction plans consistency, mobile (roadway vehicle) noise, vehicle miles traveled, and wildfire exposure risk impacts; however, the identified mitigation would not reduce

the impacts to less than significant. Thus, even though the proposed plan attempts to mitigate its impacts to the greatest extent feasible as required by CEQA, the mitigation is not technically feasible or sufficient or available to reduce impacts from significant and unavoidable.

5.3 Alternatives to the Proposed Plan

Pursuant to CEQA Guidelines Section 15126.6, this EIR presents a range of reasonable alternatives to the proposed plan for analysis and evaluation of their comparative merits. These alternatives are considered to cover the range of development alternatives that would meet the basic objectives of the plans while lessening one or more of its significant impacts. CEQA Guidelines Section 15126.6(a) states that an EIR need not evaluate every conceivable alternative. Information has been provided for each alternative that would allow meaningful comparison with the proposed plan.

The three alternatives to the proposed plan analyzed in this chapter are as follows:

- Alternative 1: Adopted General Plan Buildout (i.e., "No Project")
- Alternative 2: Increased Intensity in Non-western Areas
- Alternative 3: 25 Percent Residential Reduction

Table 5-1 shows the alternatives' components summary; this EIR Alternatives analysis examines the net change from the proposed plan in terms of potential physical environmental impacts. Detailed descriptions of the alternatives are included in the impact analyses for each Alternative in Sections 5.5 through 5.7.

Table 5-1 Alternatives Buildout Projections Summary

Feature	Proposed Plan	Alternative 1	Alternative 2	Alternative 3
Commercial, Neighborhood Business, and Mixed-use Square Feet	1,358,792	315,340	1,358,792	1,358,792
Schools Square Feet	6,444,767	-	6,444,767	6,444,767
Semi-public and Institutional Square Feet	1,401,063	1,401,063	1,401,063	1,401,063
Office Square Feet	(-)217,081	146,141	(-)217,081	(-)217,081
Industrial Square Feet	168,672	168,672	168,672	168,672
Multi-family Residential Number of Units	12,066	808	12,066	9,050
Single-family Residential (including 525 ADUs) Number of Units	7,150	238	7,150	5,363
Additional Population Estimate (Assumes 2.4 persons per household¹)	46,119	41,300²	46,119	34,591

Sources:

¹ California Department of Finance. 2022. Table E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2021-2022. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/ (accessed December 2022)

² Pleasant Hill, City of. 2003. General Plan 2003. https://www.pleasanthillca.org/DocumentCenter/View/314/Current-General-Plan?bidld= (accessed December 2022)

5.4 Plan Objectives

As described in Chapter 2, *Project Description*, the objectives for the 2040 General Plan are as follows:

- Encourage smart and sensitive development. Protect and enhance the community character
 and existing neighborhoods that define Pleasant Hill by guiding future residential and
 commercial development to meet the needs of the community and be respectful of the
 environment;
- Foster economic diversity and sustainability. Promote a diverse local economy that is flexible and adaptable to changes in consumer habits and market trends. Be a business-friendly community that supports businesses that foster new job growth and attracts visitors to the city;
- Provide barrier-free mobility. Advance and maintain a circulation network that accommodates alternative modes of travel, provides neighborhood connectivity, and enhances safety;
- Provide balanced growth. Focus new development in areas adjacent to major corridors and transit systems while preserving existing neighborhoods and open space resources. Support sustainable development that aligns with current best practices and is compatible with our community;
- Ensure public safety. Providing a safe community through public safety services, resilient
 infrastructure, public awareness, preparedness, and action plans for both human-caused and
 natural disasters; and
- **Support diverse housing options.** Create the conditions necessary to stimulate the diversity of housing options for community members of all ages and incomes.

5.5 Alternative 1: Adopted General Plan Buildout

The CEQA Guidelines (Section 15126.6[e][2]) require that the alternatives discussion include an analysis of a "No Project" Alternative. Pursuant to CEQA, the "No Project" Alternative refers to the analysis of existing conditions and what would reasonably be expected to occur in the foreseeable future if the proposed plan was not approved. This is based on current plans and consistent with available infrastructure information. The "No Project" Alternative typically will proceed along one of two lines: (1) when a plan or project is a revision of an existing regulatory plan or policy, the "No Project" Alternative will be continuation of the existing plan or policy; or (2) if a plan or project is a development project on identifiable property, the "No Project" Alternative is the circumstance under which a project does not proceed. Thus, in the case of this programmatic EIR for a proposed plan, the "No Project" Alternative would be a No New Plan Alternative that represents the continuation of existing General Plan designations throughout Pleasant Hill. Full buildout under those existing designations is assumed to occur under this alternative. Typical development assumptions are included in the below analysis of this alternative, including compliance with applicable regulations or typical City-required measures.

5.5.1 Description

The Adopted General Plan Buildout Alternative (or Alternative 1) assumes that the current land use and zoning designations would not change from the City's adopted 2003 General Plan. The 2040 General Plan would not be adopted. Current land uses for residential units and commercial, office, school, industrial, and semi-public/institutional area would remain unchanged under Alternative 1.

Future buildout would continue to follow the current designations. For purposes of the environmental analysis, it was assumed that the number of persons per household would still be 2.4.¹ Based on this, the Pleasant Hill population increase estimate would be 41,300, which represents a relative population decrease of 4,819 compared to the proposed plan (see Table 5.1). Alternative 1 would not update the Pleasant Hill General Plan. Without the 2040 General Plan, Pleasant Hill would lack a long-term blueprint for development throughout the General Plan area and not meet its current RHNA requirements.

5.5.2 Impact Analysis

Aesthetics

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under to the proposed plan, consistent with allowed existing zoning. As such, there would be less new sources of light or glare within the General Plan area that could adversely affect daytime or nighttime views. While the existing (2003) Pleasant Hill General Plan does not contain a policy requiring the City to adopt lighting standards intended to maintain ambient lighting levels and minimum glare, individual future projects would be required to mitigate lighting levels as applicable. There would also be less potential for visual character of the General Plan area to be altered, as development facilitated by the existing General Plan would follow current policies that would prevent this impact. Therefore, Alternative 1 impacts related to aesthetics would be less than significant with mitigation.

The proposed plan's impacts related to aesthetics would be less than significant with mitigation (see Section 3.1, *Aesthetics*). Alternative 1 would lessen aesthetics impacts compared to the proposed plan due to the lower overall potential for light, glare, and visual character alterations within the General Plan area, but not to the extent of reducing the impact significance level. However, this alternative would not meet the plan objectives that focus on smart and sensitive development given that infill development would not be maximized.

Air Quality

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Temporary construction-related air quality impacts from grading and construction and longer-term air quality impacts from building operation (energy usage, maintenance), would be lower than under the proposed plan. While individual future project mitigation could result in construction-related criteria air pollutant and toxic air contaminant emissions, such projects would be required to mitigate emissions as applicable as well as comply with BAAQMD basic control measures to comply with standard permit conditions. Therefore, Alternative 1 impacts related to air quality would be less than significant with mitigation.

The proposed plan's impacts related to air quality would be less than significant with mitigation (see Section 3.2, Air Quality). Alternative 1 would result in lesser levels of criteria pollutant and toxic air contaminant emission generation impacts compared to the proposed plan but not to the extent of reducing the impact significance level. However, this alternative would not meet the plan objectives that focus on smart and sensitive development given that existing land uses within the General Plan

¹ California Department of Finance. 2022. Table E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2021-2022. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/

area would not be updated with more modern facilities in compliance with latest building codes and, thus, would not promote greater energy efficiency nor maximize infill development.

Biological, Agriculture, and Forestry Resources

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Development changes related to wildlife, habitat, and waters of the United States conservation policies would follow the existing (2003) General Plan guidelines. Similar to the proposed plan, areas under the current General Plan currently developed with residential and non-residential uses likely are not suitable habitat for special-status species, wetlands, agricultural land, and forests. This alternative would follow the current mitigation measures in place to reduce the impact of significance level on biological, agriculture, and forestry resources. Therefore, Alternative 1 biological, agriculture, and forestry resources impacts would be less than significant with mitigation.

The proposed plan's impacts related to biological, agriculture, and forestry resources would be less than significant with mitigation (see Section 3.3, *Biological, Agriculture, and Forestry Resources*). Alternative 1 would have a similar impact on these resources. However, this alternative would not meet the proposed plan objectives for smart and sensitive development in terms of development construction activities potentially affecting sensitive wildlife species during construction activities. Lastly, the proposed plan includes new and updated conservation goals, policies and programs, not found in the existing General Plan.

Cultural and Tribal Cultural Resources

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. The Patrick Rogers Farm and buildings 45 years or older are identified as existing cultural resources in the General Plan area (see Section 3.4, *Cultural and Tribal Cultural Resources*). These and other not-yet-identified historic resources could be altered as part of buildout of the existing (2003) General Plan. Therefore, even with mitigation identified for the proposed plan, Alternative 1 cultural and tribal resources impacts would be significant and unavoidable.

The proposed plan's impacts related to Cultural and Tribal Resources would be significant and unavoidable even after mitigation (see Section 3.4, *Cultural and Tribal Cultural Resources*). Alternative 1 would have reduced cultural resources impacts compared to the proposed plan due to the decrease in buildout potential but not to the extent of reducing the impact significance level. However, this alternative would not adopt measures to revise the General Plan to adopt policies related to assessing and protecting historical, archaeological, and unanticipated cultural resources. Consequently, this alternative would not meet the plan objectives for smart and sensitive development in terms of development construction activities potentially affecting the significance of known and not-yet-identified historic resources during construction activities.

Geology/Soils, and Mineral Resources

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. The 2040 General Plan policy to protect paleontological resources would not be implemented and would result a lack of protection for paleontological resources. Therefore, Alternative 1 geology, soils, and mineral resources impacts would be less than significant with mitigation.

The proposed plan's impacts related to geology/soils and mineral resources would be less than significant with mitigation (see Section 3.5, *Geology, Soils, and Mineral Resources*). Alternative 1 would have a greater impact level compared to the proposed plan based on the lack of a paleontological resource protection policy that would have to be adopted in order to avoid future individual project adverse impacts. Without the adoption of this policy, this alternative would not meet plan objectives for smart and sensitive development in terms of development construction activities potentially affecting paleontological resources.

Greenhouse Gas Emissions and Energy

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Impacts related to greenhouse gas emissions generation and energy consumption would occur with development under the existing (2003) General Plan and/or as impacts occur from current population growth rates. However, the existing General Plan does not have relevant goals, policies, or programs that would reduce greenhouse gas emissions and energy consumption. Furthermore, Pleasant Hill does not have a Climate Action Plan and would, thus, not meet the State goals to reduce emissions to 40 percent below the 1990 levels by 2030 and achieve carbon neutrality by 2045. Therefore, regardless of alternative implementation, the latest BAAQMD CEQA thresholds for GHG emissions would not be met. Therefore, Alternative 1 impacts related to GHG emissions would be significant and unavoidable.

The proposed plan's impacts related to GHG emissions and energy would be significant and unavoidable (see Section 3.6, *Greenhouse Gas Emissions and Energy*). The existing General Plan buildout would have a lesser impact compared to the proposed plan, given less development would occur. However, due to the lack of a General Plan goals, policies, and programs to reduce greenhouse gas emissions and no existing Climate Action Plan, there would be a lack of consistency with the BAAQMD CEQA thresholds for GHG emissions, and thus the significant impact level would remain the same. This would hinder this alternative's ability to meet the proposed plan objective to foster economic diversity and sustainability. Furthermore, this alternative would not meet the plan objectives that focus on smart and sensitive development given that existing land uses within the General Plan area would not be updated with more modern facilities in compliance with latest building codes and, thus, would not promote greater energy efficiency nor maximize infill development. This alternative would also not meet the plan objectives that focus on providing balanced growth due to the lack of relevant General Plan goals, policies, and programs that would reduce greenhouse gas emissions and plan for sustainable growth.

Hazards, Hazardous Materials, and Wildfire

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Impacts would occur based on the construction and operational activities following the current adopted General Plan. However, portions of the General Plan area are located in and near a High Fire Hazard Severity Zone, a Local Responsibility area, and areas of vegetated open space. Similar to the proposed 2040 General Plan, compliance with applicable codes and regulations would not fully reduce the risk of loss, injury, or death from wildfire associated with development under the current General Plan. Furthermore, population and VMT growth would continue as projected under the current plan. This increase in population and VMT could result in roadway and evacuation route congestion during an

emergency. Therefore, Alternative 1 impacts related to hazards, hazardous materials, and wildfire would be significant and unavoidable.

The proposed plan's impacts related to hazards would be significant and unavoidable (see Section 3.7, *Hazards, Hazardous Materials, and Wildfire*). Alternative 1 would have a similar impact level compared to the proposed plan due to the area being in and near a High Fire Hazard Severity Zone, a Local Responsibility area, and areas of vegetated open space. Furthermore, the increase in population and VMT would have a similar impact level on emergency response and evacuation plan consistency. The current General Plan would not meet project objectives due to the lack of a plan to adopt a new General Plan policy to conduct project design review for wildlife risk reduction, which the proposed 2040 General Plan would implement in order to ensure the public safety project objective.

Hydrology and Water Quality

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Ground-disturbing construction activities that could potentially affect water quality from sedimentation or accidental spills would occur following current adopted zoning. Any changes related to hydrology, water quality, watersheds and drainage patterns, flood and inundation hazards, and ground water resource management caused by changes in existing development would follow the same adopted standards. Therefore, in comparison to the proposed plan, a similar level of hydrology and water quality impacts would occur under this alternative. Therefore, Alternative 1 impacts related to hydrology and water quality would be less than significant.

The proposed plan's impacts related to hydrology and water quality would be less than significant (see Section 3.8, *Hydrology and Water Quality*). The adopted General Plan's buildout would have a similar less than significant impact on this resource. However, this alternative would not incorporate the proposed plan smart and sensitive development objective due to the lack of hydrology and water quality enhancements that would be implemented by the 2040 General Plan.

Land Use Planning, Population, and Housing

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Applicable land use plans, policies, and regulations would continue to be implemented across the General Plan area. However, the existing (2003) General Plan did not account for the increase in potential sites for housing and non-residential development. This is evident in the existing General Plan's Potential Sites for Housing, 1999-2006 (Table H22)²that only identifies 81.2 acres of vacant or underutilized land, of which 65 acres were deemed available for commercial development potential. This acreage is smaller compared to the 102 acres of vacant or underutilized land identified in the proposed 2040 General Plan, most of which is identified for single-family development (approximately 80 acres) and accounts for the addition of dwelling units that would come with the increase in population. This alternative would not include allowance for future population and development growth or plan for updated maximum buildout, which the 2040 General Plan would have. Therefore, Alternative 1 land use, population, and housing impacts would be less than significant with mitigation.

²Pleasant Hill, City of. 2003. General Plan 2003. https://www.pleasanthillca.org/DocumentCenter/View/314/Current-General-Plan (accessed December 2022).

The proposed plan's impacts related to land use/planning and population/housing would be less than significant (see Section 3.9, Land Use Planning, Population, and Housing). Alternative 1 would have a greater impact related to land use planning, population, and housing compared to the proposed plan due to the most recent State-mandated RHNA requirements not being met. Without this requirement, population growth and needs would not be met, thus resulting in a greater impact level. In addition, this alternative would not meet the balanced growth or the smart and sensitive development plan objectives due to the lack of planning for anticipated population and balanced development growth.

Noise

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Temporary noise generation or level increase from 2040 General Plan-facilitated future projects would be reduced than under the proposed plan. However, Contra Costa Boulevard/North Main Street was identified as an area with increased mobile noise due to continued development in the area³, making impacts potentially significant. Because of this, impacts to noise would still be significant even if no construction were to occur under the adopted plans. Therefore, Alternative 1 impacts related to noise would be significant and unavoidable.

The proposed plan's impacts related to noise would be significant and unavoidable (see Section 3.10, *Noise*). Alternative 1 would have a similar impact level related to noise compared to the proposed plan. While this alternative would not generate any new and significant noise levels, it would also not have the proposed plan's noise mitigation. Without mitigation, the proposed plan objective to encourage smart and sensitive development would not be met in terms of development potentially affecting noise-sensitive groups.

Public Services and Recreation

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. The population increase resulting from development facilitated by the existing (2003) General Plan would occur as projected as would an increased demand and usage of public services and recreational facilities. However, further increase in population and public service demand past the existing General Plan estimate would not be accounted for. Without adoption of the proposed plan, the anticipated population growth and associated increase in use of public services, increased demand for new recreation, and potential increased demand for school services would be unaddressed. However, Alternative 1 population growth would be lower than compared to the estimated population under the proposed plan, such that the additional need for fire and police protection services, parks and recreational facilities, and libraries that would be less significant than that associated with the increased demand generated by the proposed plan. As a result, Alternative 1 public services and recreation impacts would be less than significant.

The proposed plan's impacts related to public services and recreation would be significant and unavoidable (see Section 3.11, *Public Services and Recreation*). The existing General Plan buildout would have a reduced impact of less than significant compared to the proposed plan due to Alternative 1's relative decreased projected population growth. However, this alternative would not meet the proposed plan objectives to provide balanced growth and ensure public safety due to the

³Pleasant Hill, City of. 2003. Draft Environmental Impact Report for the City of Pleasant Hill Draft General Plan. https://www.pleasanthillca.org/DocumentCenter/View/316/Draft-EIR-for-the-Draft-General-Plan---Jan-2003 (accessed December 2022).

lack of planning for increases in demand and potential new construction for necessary public facilities.

Transportation and Traffic

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. The Transportation Impact Analysis for this "No Project" alternative included in Appendix E (see Tables 2 and 3) concluded that VMT per resident would be 11 (which is greater than under the proposed plan) and that VMT per employee would be 14 (which is the same as under the proposed plan). Changes in VMT per resident and per employee would follow current zoning development standards; however, there would be no plans implemented to ensure a transportation demand management (TDM) plan is created to reduce VMT generated by an individual project, as the current General Plan does not include any. Therefore, Alternative 1 transportation impacts would be significant and unavoidable.

The proposed plan's impacts related to transportation would be significant and unavoidable (see Section 3.12, *Transportation*). Alternative 1 would have a greater impact related to transportation compared to the proposed plan due to the lack of mitigation measures and/or plans towards reducing any future individual project VMT increases. This alternative also would not meet the proposed plan goal of encouraging smart and sensitive development, barrier free mobility, or balanced growth due to transportation-related impacts (specifically VMT) would being accounted for or managed.

Utilities and Service Systems

Under Alternative 1, fewer residential units and reduced non-residential development would be developed than under the proposed plan, consistent with allowed existing zoning. Increased demand for stormwater drainage, water supply, or wastewater treatment would be consistent with the projected population increase in the existing (2003) General Plan. There would also be an increase in demand as the City's population continues to naturally grow. The existing (2003) General Plan would not account for this increase in demand at the level that the proposed plan has anticipated, including increases in demand for water, wastewater, and stormwater facilities. As such, the increase in the utilities and service systems' operational uses would be unanticipated alongside the increase in demand. Therefore, Alternative 1 utilities and service systems impacts would be significant and unavoidable.

The proposed 2040 General Plan's impacts related to utilities and service systems would be significant and unavoidable (see Section 3.13, *Utilities and Service Systems*). The existing General Plan buildout would have a lesser impact compared to the proposed plan due to the existing plan's lower residential unit count and reduced non-residential development, which would have less of a potential impact compared to the proposed plan's larger population projection. However, this lower residential unit count and reduced non-residential development would result in fewer potential impacts to utility and service systems but would not change the overall significance level. This alternative would not meet the proposed plan's smart and sensitive development objective due to the lack of population increase anticipation compared to what the proposed plan have projected.

5.5.3 Conclusion

In summary, Alternative 1 would avoid the significant and unavoidable public services impacts related to construction of new and expanded schools. However, this alternative would not avoid most of the significant and unavoidable impacts of the proposed plan, including cultural resources (historic resources), GHG emissions, hazards (wildfire exposure risk), noise (construction and operational mobile), and utilities and service systems (construction of new and expanded water, wastewater, and stormwater facilities). There would also be increased impacts related to geology, soils, and mineral resources, land use planning, population, and housing resources, as well as transportation (VMT). Overall, this alternative would not encourage future residential and commercial development to meet the needs of the community with respect to the environment, nor would it advance and maintain an accommodating circulation network for barrier-free mobility to the extent that the proposed plan would.

5.6 Alternative 2: Increased Intensity in Non-western Areas

5.6.1 Description

The Increased Intensity in the Non-western Areas Alternative (or Alternative 2) would adopt the 2040 General Plan with an increase in density and intensity development in the central and eastern portions of the General Plan area. Alternative 2's residential and non-residential development totals would be similar to the proposed plan's buildout projections (see Table 5-1). For purposes of the environmental analysis, it is assumed that the maximum density allowed anywhere within the General Plan area would be 100 units/acre, similar to the proposed plan. However, the average density, and in turn the average floor area ratio (FAR),⁴ under this alternative would increase with concentrating the same total amount of General Plan buildout development as under the proposed plan within approximately 66 percent of the General Plan area (compared to within 100 percent of the General Plan area under the proposed plan). For purposes of the environmental analysis, it is assumed that the number of persons per household would still be 2.4. Based on this, the population would be 46,119, same as under the proposed plan. Alternative 2 would update the Pleasant Hill General Plan but via a different physical configuration and average density resulting in changes to the identified housing opportunity sites, compared to the proposed plan. This alternative would be focused on further enhancement of public safety protection.

5.6.2 Impact Analysis

Aesthetics

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would be focused in the central and eastern portions of the General Plan area. Development would tend to be located along transportation corridors in the eastern portion rather than along commercial corridors and/or infill development throughout the entire General Plan area. There would be an overall FAR increase that would

⁴ FAR is the relationship between the total amount of usable floor area that a building would have, and the total area of the lot on which the building would stand. A higher FAR would indicate greater density (i.e., greater gross square footage per lot area).

⁵ California Department of Finance. 2022. Table E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2021-2022. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/ (accessed December 2022)

potentially affect visual character in the central and eastern portions of the General Plan area. Available scenic vistas, such as public views of the hills west of Pleasant Hill, could be impacted by the building height increases with development concentrated in the eastern and central areas. However, this alternative would require mitigation to comply with the Pleasant Hill Municipal Code Title 18, *Planning and Land Use*. Therefore, Alternative 2 impacts related to aesthetics would be less than significant with mitigation.

The proposed plan's impacts related to aesthetics would be less than significant with mitigation (see Section 3.1, *Aesthetics*). Alternative 2 would have a greater level of aesthetics impact compared to the proposed plan due to the increased density of development in the central and eastern portions of the General Plan area, resulting in potentially adverse effects on scenic vistas but not to the extent of increasing the impact significance level. This alternative would not meet proposed plan objectives for smart and sensitive development, as it would result in increased FAR and building heights that could result in development to block scenic vistas.

Air Quality

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. There would be similar levels of overall construction-related and operation-related emissions. There would be a temporary increase in emissions from construction activities and similar operational emissions and odors that would require mitigation measures similar to the proposed plan. Therefore, Alternative 2 air quality impacts would be less than significant with mitigation.

The proposed plan's impacts related to air quality would be less than significant with mitigation (see Section 3.2, *Air Quality*). Alternative 2 would have a similar level of impacts compared to the proposed plan with impacts requiring mitigation measures available to further construction-related and operation-related impacts similar to the proposed plan (MM AQ-1 through AQ-4). Alternative 2 would meet the proposed plan objective of smart and sensitive development, as this alternative would adopt proposed plan policies to help address air quality impacts from construction and operational activities.

Biological, Agriculture, and Forestry Resources

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. Development would be required to implement the same federal, State, and local regulations to not impact agricultural, forestry, and most biological resources in the area. However, development in this area could result in some potential direct or indirect impacts on nesting birds and roosting bats. As a result, the same mitigation measures (MM BIO-1 and BIO-2) would be required for development under Alternative 2 to occur. Therefore, Alternative 2 biological, agriculture, and forestry resources impacts would be less than significant with mitigation.

The proposed plan's impacts related to biological resources would be less than significant with mitigation incorporated (see Section 3.3, *Biological, Agriculture, and Forestry Resources*). Alternative 2 would have a similar impact level on biological resources compared to the proposed plan. This alternative would achieve the proposed plan objective related to the adoption of the proposed 2040 General Plan Environment Element update and Environment Element Program. This alternative would also encourage smart and sensitive development that would also meet proposed plan objectives.

Cultural and Tribal Cultural Resources

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would be focused in the central and eastern portions of the General Plan area. Because this development would be more concentrated in these areas, potential impacts related to historical resources, such as buildings over 45 years old or older, would be reduced. However, this alternative would still require the same mitigation (MM CR-1 through CR-4) related to potential alteration of historic and archeological resources due to potential development. Therefore, even with the mitigation identified for the proposed plan, Alternative 2 cultural and tribal resources impacts would be significant and unavoidable.

The proposed plan's impacts related to Cultural and Tribal Resources would be significant and unavoidable with mitigation incorporated (see Section 3.4, *Cultural and Tribal Cultural Resources*). Alternative 2 would have lesser impacts compared to the proposed plan due to a relative decreased footprint of potential historic resources affects but not to the extent of reducing the impact significance level. However, this alternative would meet the proposed plan objective for smart and sensitive development due to the increase in FAR resulting in concentrating development in central and eastern portions of the General Plan area, which would decrease the potential for historic resources to be impacted by development construction-related activities.

Geology, Soils, and Mineral Resources

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. The central and eastern portions of the General Plan area are mostly underlain by sediments ranging from the Holocene to the Paleocene, with the older sediments being at a higher paleontological sensitivity level. Therefore, these paleontological resources would experience ground-disturbing activity due to construction efforts resulting from Alternative 2, which has the potential to have an adverse impact on erosion prevention and sediment control. However, this alternative includes the adoption of the proposed plan's mitigation measures to incorporate a paleontological resources protection policy (MM GEO-1). Therefore, Alternative 2 geology, soils, and mineral resources impacts would be less than significant with mitigation.

The proposed plan's impacts related to geological, soil, and mineral resources would be less than significant with mitigation incorporated (see Section 3.5, *Geology, Soils, and Mineral Resources*). Alternative 2 would have a similar level of geological, soil, and mineral resource impacts compared to the proposed plan with MM GEO-1 implemented. Incorporation of the proposed plan and its mitigation measures would help this alternative meet the proposed plan objective for smart and sensitive development in terms of the measures taken to reduce the chance of development construction activities potentially affecting paleontological resources.

Greenhouse Gas Emissions and Energy

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. There would be construction activities that would occur in order to increase development within the central and eastern portions of the General Plan area. Due to the increase in development density and intensity in a smaller portion of the General Plan area, mobile GHG emissions could be reduced. However, there would still not be a defined strategy as to

how the City would meet the goals to reduce emissions to 40 percent below the 1990 levels by 2030 and reach carbon neutrality by 2045. Without a clearly defined outline for this goal, the BAAQMD CEQA thresholds for GHG emissions would not be met. Therefore, Alternative 2 impacts related to GHG emissions would be significant and unavoidable.

The proposed plan's impacts related to GHG emissions and energy would be significant and unavoidable (see Section 3.6, *Greenhouse Gas Emissions and Energy*). Although the impact level of mobile GHG emissions could be lessened related to potentially lower VMT, Alternative 2 would have a similar impact level compared to the proposed plan due to the lack of consistency with the BAAQMD CEQA thresholds for GHG emissions. This would hinder this alternative's ability to meet the proposed plan objective to foster economic diversity and sustainability. Furthermore, the proposed plan objectives to encourage smart and sensitive development and ensure public safety would not be met in terms of emissions of GHGs.

Hazards, Hazardous Materials, and Wildfire

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, however, development would occur only in the central and eastern portions of the General Plan area. Due to development being more concentrated in the central and eastern portion of the General Plan area further away from vegetated open space areas and State and locally designated wildfire risk areas (the southwestern portion of the City Limits and the western and southwestern portions of the Sphere of Influence outside of City Limits), wildfire exposure risk would be reduced. Additionally, this alternative would adopt the proposed plan's mitigation measures (MM HAZ-1, HAZ-2, and HAZ-3) to implement a new General Plan policy to conduct project design review for wildfire risk reduction, which would further decrease potential wildfire impacts under this alternative. In addition, impacts related to potential exposure to hazardous materials and non-wildfire hazards (flooding) would be less than significant similar to the proposed plan. Development facilitated by Alternative 2 would result in similar population as under the proposed plan, which could increase roadway congestion. Alternative 2 may hinder evacuation routes during an emergency since additional population would be concentrated in eastern and central areas. Therefore, Alternative 2 impacts related to hazards, hazardous materials, and wildfire would be less than significant with mitigation.

The proposed plan's impacts related to hazards would be significant and unavoidable (see Section 3.7, *Hazards, Hazardous Materials, and Wildfire*). Alternative 2 would have a lesser impact level compared to the proposed plan due the increase in development density within the central and eastern portions of the General Plan area and incorporation of the proposed plan's hazards mitigation measures requiring design review, construction, and project design wildfire risk reduction measures to the extent of reducing the impact significance level to less than significant with mitigation. Alternative 2 would meet the proposed plan objective to ensure public safety by locating development farther from designated wildfire risk areas and adopting measures to review project designs to ensure that wildfire risk reduction measures are incorporated.

Hydrology and Water Quality

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. With concentration of development in a smaller portion of the General Plan area, increased FAR would occur within these areas. This similarity in development type compared to the proposed plan would also result in the similar potential effect on hydrology,

water quality, watersheds and drainage patterns, flood and inundation hazards, and ground water resource management. Alternative 2 would also implement applicable hydrology and water quality enhancements similar to the proposed plan that the existing (2003) General Plan would lack. Therefore, Alternative 2 impacts related to hydrology and water quality would be less than significant.

The proposed plan's impacts related to hydrology and water quality would be less than significant (see Section 3.8, *Hydrology and Water Quality*). Alternative 2 would have a similar impact level of less than significant. This alternative would meet the proposed plan objective to encourage smart and sensitive development, as it would implement the 2040 General Plan policies to meet the most recent water quality standards.

Land Use Planning, Population, and Housing

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. Increased density and intensity development would occur in the central and eastern portions and would be consistent with applicable land use plans, policies, and regulations. The increase in density through increased FAR instead of additional building development would avoid any physical divide in community areas and potential displacement. Alternative 2 would also accommodate and plan for population growth and any development. Therefore, Alternative 2 impacts related to land use planning, population, and housing would be less than significant.

The proposed plan's impacts related to land use and population/housing would be less than significant (see Section 3.9, *Land Use Planning, Population, and Housing*). Alternative 2 would have a similar impact level compared to the proposed plan. Though both plans assume maximum residential and non-residential buildout, unlike the proposed plan, Alternative 2 would not meet plan objectives to support diverse housing options and balanced growth.

Noise

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. Construction to increase building heights throughout the proposed area would occur, likely causing new noise sources due to construction activities. While this alternative would adopt the proposed plan's mitigation measures to reduce new noise production (MM NOI-1 and NOI-2), impacts on noise would still be significant due to the temporary increase in noise levels during construction potentially affecting nearby noise-sensitive receptors and exceeding noise standards. Therefore, Alternative 2 impacts related to noise would be significant and unavoidable.

The proposed plan's impacts related to noise would be significant and unavoidable (see Section 3.10, *Noise*). Alternative 2 would have a similar significance level compared to the proposed plan due to noise from construction activities temporarily exceeding noise standards. This alternative would meet the proposed plan's smart and sensitive development objective in terms of noise management decreasing potential effects on sensitive receptors.

Public Services and Recreation

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. The increase in development similar to the proposed plan with increased FAR would cause a population increase, specifically among school-aged children. This increase would result in a higher demand for old and new public services, such as schools. As a result, the large amount of net new school facilities anticipated under this alternative would result in significant construction impacts associated with air quality, cultural resources, paleontological resources, and VMT. These impacts would be similar to the proposed plan's impacts on schools. Furthermore, development facilitated by Alternative 2 would concentrate population within Pleasant Hill, resulting in the same additional need for fire and police protection services, parks and recreational facilities, and libraries as under the proposed plan. However, the increase demand for schools resulting from development facilitated under Alternative 2 would still result in public services and recreation impacts being significant and unavoidable.

The proposed plan's impacts related to public services and recreation would be significant and unavoidable (see Section 3.11, *Public Services and Recreation*). Alternative 2 would have a similar impact level compared to the proposed plan. This alternative would meet the proposed plan objectives to provide balanced growth and ensure public safety, because the increase in demand and potential new construction for public facilities would be accounted for.

Transportation

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. There would be an increase in FAR that could lead to a decrease in VMT per resident and employee as people move into these new spaces for work and living purposes. While future buildout still anticipates the same development total similar to the proposed plan buildout projections (see Table 5-1) resulting in an increase in population, the increase in development density would contribute to an overall VMT reduction. Furthermore, development buildout under this alternative would be planned more proximate to transportation corridors in the eastern and central portions of the General Plan area. As a result, VMT-related impacts would be reduced. However, similar to the proposed plan, Alternative 2 transportation impacts would be significant and unavoidable due to the lack of a specific TDM plan with TDM programs to ensure reduction and mitigation of VMT impacts.

The proposed plan's impacts related to transportation would be significant and unavoidable (see Section 3.12, *Transportation*). Alternative 2 would have a lesser impact compared to the proposed plan due to the reduction in VMT per resident and employee but not to the extent of reducing the impact significance level. However, this alternative would meet the proposed plan objective to provide barrier-free mobility due to the increase in FAR and concentrated location of development resulting in a potential decrease in VMT per resident and per employee across the General Plan area.

Utilities and Service Systems

Under Alternative 2, the same total amount of residential and non-residential development would occur as under the proposed plan, but development would occur only in the central and eastern portions of the General Plan area. There would be in an increase in demand for water, wastewater,

and stormwater facilities compared to existing conditions with this alternative's increase in population. Construction-related impacts due to potential need for new or expanded utility infrastructure and facilities would be significant and unavoidable, as there would be significant and unavoidable construction impacts associated with air quality, historic resources, paleontological resources, and noise. Furthermore, the construction of the new or expanded facilities would result in an unanticipated increase in operational demand. Therefore, Alternative 2 utilities and service systems impacts would be significant and unavoidable.

The proposed plan's impacts related to utilities and service systems would be significant and unavoidable (see Section 3.13, *Utilities and Service Systems*). Alternative 2 would have a similar significant and unavoidable impact level compared to the proposed plan due to impacts associated with construction and operation of new or expanded facilities. However, this alternative would meet the proposed plan balanced growth objective due to the population and related utilities demand increase being planned for with implementation of the proposed 2040 General Plan under this alternative.

5.6.3 Conclusion

In summary, Alternative 2 would have a reduced impact level related to cultural resources (i.e., historical resources), transportation (i.e., VMT), and hazards (i.e., wildfire exposure risk). However, the cultural resources and transportation impacts would remain at a significant and unavoidable impact level. Furthermore, this alternative would not avoid or reduce the significant and unavoidable GHG emissions, noise, public services, and utilities and service systems impacts of the proposed plan and would also result in an increased significant aesthetics impact related to scenic vistas of the hills west of Pleasant Hill. However, this alternative would advance the proposed plan objectives to provide barrier-free mobility and encourage smart and sensitive development that would meet the needs of the community throughout the General Plan area.

5.7 Alternative 3: 25 Percent Residential Reduction

5.7.1 Description

The 25 percent Residential Reduction Alternative (or Alternative 3) would reduce residential buildout by 25 percent compared to the proposed plan's projected buildout. Compared to the proposed plan, the number of multi-family residential units would decrease by 3,016 units, and single-family (including ADUs) residential units would decrease by 1,787 units (see Table 5-1). Non-residential gross square footage amount and type breakdown would be the same as under the proposed plan. This alternative would have the same overall footprint (but lower residential density and height) across the General Plan area as the proposed plan while not falling below the RHNA requirements or changing the identified housing opportunity sites. For purposes of the environmental analysis, it is assumed that the number of persons per household would still be 2.4.6 Based on this, there would be a 11,528-population decrease under Alternative 3. Alternative 3 would update the Pleasant Hill General Plan but via a reduced residential growth scenario. This alternative would be focused on smart and sensitive growth while still meeting RHNA requirements.

⁶ California Department of Finance. 2022. Table E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2021-2022. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/ (accessed December 2022)

5.7.2 Impact Analysis

Aesthetics

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. The decrease in residential development would result in a reduced impact on views, nighttime lighting, and shadow, as there would be less residential uses on-site than the proposed plan anticipated. This would result in a less than significant impact on aesthetic resources. However, due to this alternative having the same footprint as the proposed plan, impacts would be similar to the proposed plan's impacts on aesthetics and a mitigation measure (MM AES-1) would be incorporated. Therefore, Alternative 3 impacts related to aesthetics would be less than significant with mitigation.

The proposed plan's impacts related to aesthetics would be less than significant with mitigation (see Section 3.1, *Aesthetics*). Alternative 3 would have a similar impact on aesthetics due to the similarity in development footprint compared to the proposed plan; however, the impact level would be incrementally reduced due to the relative decrease in residential development decreasing potential impacts on scenic vistas. This alternative would meet the proposed plan objective to encourage smart and sensitive development, due to the overall impacts related to aesthetics being lesser while providing an increase in development potential.

Air Quality

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. The decrease in residential development could result in less mobile-related emissions compared to the proposed plan. However, construction is still anticipated under this alternative and would result in the generation of criteria air and toxic air contaminant emissions during construction of individual future projects that could in turn affect regional air quality and local respiratory health. As a result, this alternative would still implement proposed plan mitigation measures to adopt and implement new General Plan policies to reduce construction and operational impacts to air quality (MM AQ-1 through AQ-4). Therefore, Alternative 3 air quality impacts would be less than significant with mitigation.

The proposed plan's impacts related to air quality would be less than significant with mitigation (see Section 3.2, *Air Quality*). Alternative 3 would have a similar level of impacts compared to the proposed plan, due to the same development footprint as the proposed plan and, thus, the same amount of development grading and other construction activities impacting air quality. Implementing proposed plan mitigation to adopt General Plan policies to reduce construction-related emissions (MM AQ-1), reduce operation-related emissions (MM AQ-2), and implement construction health risk assessments (MM AQ-3)would result in this alternative meeting the proposed plan objective to ensure public safety given that implementation of these policies would result in decreased impacts related to public health.

Biological, Agriculture, and Forestry Resources

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. This development would be required to implement the same federal,

State, and local regulations to not impact agricultural, forestry, and most biological resources in the area. However, there is the potential for development to result in direct or indirect potential impacts on nesting birds and roosting bats. As a result, the same mitigation measures (MM BIO-1 and BIO-2) would be required for development under Alternative 2. Therefore, Alternative 3 biological, agriculture, and forestry resources impacts would be less than significant with mitigation.

The proposed plan's impacts related to biological resources would be less than significant with mitigation incorporated (see Section 3.3, *Biological, Agriculture, and Forestry Resources*). Alternative 3 would have a similar level of impact related to biological resources compared to the proposed plan. This alternative would achieve the proposed plan objective for smart and sensitive development, due to the adoption of updated regulations for biological resources.

Cultural and Tribal Cultural Resources

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. Construction similar to the proposed plan's projections would occur but would develop less residential units compared to the proposed plan. However, the same development footprint as the proposed plan is still anticipated, meaning development under this alternative could result in a substantial adverse change on historical resources identified as buildings over 45 years old. The proposed plan's mitigation measure could be implemented by preparing historical resource evaluations to reduce significant historical resource impacts before construction (MM CR-1), assessing archeological resources before future project approval (MM CR-2), and stopping construction in the event of an unanticipated discovery (MM CR-3 and CR-4). However, even with mitigation implementation, existing historical resources could still be materially impaired by individual future projects and the loss of historical fabric could not be readily compensated for by commemorative mitigation. Therefore, Alternative 3 cultural and tribal resources impacts would be significant and unavoidable.

The proposed plan's impacts related to Cultural and Tribal Resources would be significant and unavoidable (see Section 3.4, *Cultural and Tribal Cultural Resources*). Alternative 3 would have a similar level of significant and unavoidable resource impacts compared to the proposed plan. However, this alternative would meet the proposed plan objective to encourage smart and sensitive development because the projected residential buildout reduction would reduce the potential for development to impact historic resources.

Geology, Soils, and Mineral Resources

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. The decreased residential buildout construction would be underlain by sediments ranging from the Holocene to the Paleocene, with the older sediments being at a higher paleontological sensitivity level. Therefore, these paleontological resources would experience ground-disturbing activity due to construction efforts resulting from Alternative 2, which has the potential to adverse impact the sediments. Therefore, this alternative would adopt the proposed plan's mitigation measure to incorporate a paleontological resources protection policy (MM GEO-1). Alternative 3 geology, soils, and mineral resources impacts would be less than significant with mitigation.

The proposed plan's impacts related to geological, soil, and mineral resources would be less than significant with mitigation incorporated (see Section 3.5, *Geology, Soils, and Mineral Resources*).

Alternative 3 would result in lesser geological, soil, and mineral resource impacts compared to the proposed plan with MM GEO-1 implemented due to the decreased number of units resulting in a decrease in potential cases of impacts on paleontological resources but not to the extent of decreasing the impact significance level. Implementing the proposed plan and its mitigation measures would help meet the proposed plan objective encouraging smart and sensitive development, due to the decreased potential of development construction activities affecting paleontological resources.

Greenhouse Gas Emissions and Energy

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. While this alternative would adopt the GHG mitigation measures from the proposed plan to combat any impacts, there would still be the issue of the need for a defined strategy as to how City would meet the goal to reduce emissions to 40 percent below the 1990 levels by 2030 and reach carbon neutrality by 2045. However, with mitigation measures in place (MM GHG-1 and GHG-2), the decrease in residential unit construction would lessen GHG emissions impacts compared to the proposed plan. Therefore, Alternative 3 impacts related to GHG emissions would be significant and unavoidable.

The proposed plan's impacts related to GHG emissions and energy would be significant and unavoidable (see Section 3.6, *Greenhouse Gas Emissions and Energy*). Alternative 3 would have a lesser impact level due to the decrease in residential buildout. However, with the need to implement mitigation measures for this plan to be consistent with BAAQMD CEQA thresholds for GHG emissions, impacts would still be significant and unavoidable. This would hinder this alternative's ability to meet the proposed plan objective to foster economic diversity and sustainability. Furthermore, the proposed plan objective to encourage smart and sensitive development would not be met with regard to emissions of GHGs.

Hazards, Hazardous Materials, and Wildfire

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. Construction plans and operational activities would likely follow guidelines and regulations to avoid significant effects from hazardous material transportation, emission, and/or exposure. However, this alternative would be built out throughout the entire General Plan area, including the southwestern portion of the City Limits and the western and southwestern portions of the City Sphere of Influence outside of City Limits, which are in and near a High Fire Severity Zone and Local Responsibility Area. Although this alternative has decreased development, its overall footprint would be the same as the proposed plan's footprint, resulting in the same siting of development in and near wildfire risk zones. Furthermore, this alternative would result in a decrease in population compared to the proposed plan, which may potentially congest roadways and evacuation routes during an emergency. Therefore, Alternative 3 impacts related to hazards, hazardous materials, and wildfire would still be significant and unavoidable.

The proposed plan's impacts related to hazards would be significant and unavoidable (see Section 3.7, *Hazards, Hazardous Materials, and Wildfire*). Alternative 3 would have a lesser impact level compared to the proposed plan due to the area being in and near a High Fire Severity Zone, a Local Responsibility Area, and areas of vegetated open space, but not to the extent of changing the significance level. The population decrease would also result in a significant impact level due to

potential impacts on emergency response and evacuation plan consistency. Alternative 3 would meet plan objective with policy incorporation (MM HAZ-1), which would ensure public safety by reducing the risk of wildfire impacts through project design assessment.

Hydrology and Water Quality

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. Water quality standards, drainage patterns, flood and inundation hazards, and water management plans would be similar to the proposed plan's impact due to the similarity in development footprint. However, less residential units under this alternative and implementation of applicable hydrology and water quality enhancements over the 2003 adopted General Plan would reduce the impact level. Therefore, Alternative 3 impacts related to hydrology and water quality would be less than significant.

The proposed plan's impacts related to hydrology and water quality would be less than significant (see Section 3.8, Hydrology and Water Quality). Alternative 3 would have a similar less-than-significant impact on these resources but at a lesser level due to the decrease in residential units. This alternative would meet the proposed plan objective for smart and sensitive development, due to the implementation of proposed plan policies to meet the most recent water quality standards.

Land Use Planning, Population, and Housing

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. This change in development envelope would likely not result in a change of zoning designations that could conflict with the land use plans, policies, and regulations currently in place; rather it is anticipated land use designations would remain similar to the proposed plan, given that full density allowance would not be exercised. However, this impact would remain at a less than significant impact level with updates to the Zoning Code that follow General Plan implementation. Therefore, Alternative 3 land use, population, and housing impacts would be less than significant at a greater impact level.

The proposed plan's impacts related to land use would be less than significant (see Section 3.9, Land Use Planning, Population, and Housing). While still at a less-than-significant level, Alternative 3 would have greater land use planning, population, and housing impacts compared to the proposed plan, due to the Zoning Code update to follow the General Plan update. This alternative would still achieve the development variety because this alternative would still implement the proposed 2040 General Plan, which would fulfill the plan objective to support diverse housing options.

Noise

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. Development under this alternative could result in new noise sources. Although there would be a decrease in construction activities for residential units, development would still occur under this alternative, meaning impacts related to noise would remain significant due to the temporary increase in noise levels during construction which could potentially affect nearby noise-sensitive receptors by exceeding noise standards. As a result, this alternative would adopt the proposed plan's mitigation measures to reduce new noise production (MM NOI-1 and NOI-2). Therefore, Alternative 3 impacts related to noise would be significant and unavoidable.

The proposed plan's impacts related to noise would be significant and unavoidable (see Section 3.10, *Noise*). Alternative 2 would have a similar significance level compared to the proposed plan, due to noise associated with construction activities temporarily exceeding noise standards. This alternative would meet the proposed plan objective to encourage smart and sensitive development via management of noise increase.

Public Services and Recreation

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. While residential development would be decreased under this alternative, the population is still projected to increase by 34,591 persons (see Table 5-1). This would include an increase in school-aged children, which would result in a higher demand for old and new public services, such as schools. As a result, the large amount of net new school facilities anticipated under this alternative would result in significant construction impacts associated with air quality, cultural resources, paleontological resources, and noise. Development facilitated by Alternative 3 would increase the population of Pleasant Hill compared to existing conditions that could still result in the additional need for fire and police protection services, parks and recreational facilities, and libraries. Population increase facilitated by development under Alternative 3 would result in public services and recreation impacts being significant and unavoidable.

The proposed plan's impacts related to public services and recreation would be significant and unavoidable (see Section 3.11, *Public Services and Recreation*). Alternative 3 would have a similar impact level compared to the proposed plan, though slightly reduced due to fewer residential units. This alternative would also meet the proposed plan objectives to provide balanced growth and ensure public safety, because the increase in demand and potential new construction for public facilities would be accounted for.

Transportation

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. The relative decrease in residential development would result in a relative decrease in population (see Table 5-1), which in turn would result in a relative decrease in VMT compared to the proposed plan. As a result, there would be an incremental decrease related to transportation impacts under Alternative 3. However, without an implemented TDM plan, Alternative 3 transportation impacts would be significant and unavoidable.

The proposed plan's impacts related to transportation would be significant and unavoidable (see Section 3.12, *Transportation*). Alternative 2 would have lesser impacts compared to the proposed plan due to the relative decrease in VMT as a result of the relative decrease in projected population but not to the extent of changing the significance level. In addition, this alternative would meet the proposed plan objectives to encourage smart and sensitive development and barrier free mobility given the assumption that Alternative 3 would also implement a TDM plan to further ensure VMT reduction.

Utilities and Service Systems

Under Alternative 3, 25 percent fewer residential units and the same total amount of non-residential development would occur as under the proposed plan, and overall development would have the same footprint. There would be a decrease in residential development, which would result

in a reduced demand for stormwater drainage, water supply, and wastewater treatment in comparison to the proposed plan. However, because development and population increase would still occur under this alternative, construction and operation-related impacts due to the need and use for new or expanded utility infrastructure and facilities that comes from an increase in population would be significant, due to the significant and unavoidable construction and operational impacts associated with air quality, historic resources, paleontological resources, and noise. Therefore, Alternative 3 utilities and service systems impacts would be significant and unavoidable.

The proposed plan's impacts related to utilities and service systems would be significant and unavoidable (see Section 3.13, *Utilities and Service Systems*). Alternative 3 would have a similar impact level to the proposed plan, due to impacts associated with construction of new or expanded facilities. However, this alternative would meet the proposed plan objective regarding smart and sensitive development due to the planning and implementation of this alternative accounting for the population and related utilities demand increase.

5.7.3 Conclusion

In summary, Alternative 3 would not avoid the significant and unavoidable cultural resources (i.e., historical resources), hazards (i.e., wildfire), noise, public services, and utilities impacts of the proposed plan. Impacts related to greenhouse gas emissions would also be significant and unavoidable, but at a lesser level. Furthermore, land use impacts would remain less than significant, but at a greater level. Impacts related to aesthetics and geology/soils would still be less than significant with mitigation, but at a lesser level. This alternative would still satisfy the goal to advance the smart and sensitive development objective of the proposed plan to the same extent that the proposed plan would due to the same balanced growth goals and policies. However, the decrease in residential units would potentially undermine the objective to support diverse housing options given reduced density options.

5.8 Alternatives Considered but Rejected

The following summarizes alternatives considered, but ultimately rejected for inclusion in the analysis, because they would not meet most of the proposed plan objectives, would not substantially reduce impacts compared to the proposed plan, or were determined to be infeasible.

1. The City considered a potential "Increased Residential" alternative that would increase the amount of residential buildout throughout the General Plan area but eliminate some non-residential land use development as a result. Underutilized or vacant areas designated for commercial or other non-residential use would instead be designated for residential buildout. This potential alternative would meet the proposed plan objective to further support diverse housing options. However, the proposed 2040 General Plan already meets and exceeds the RHNA requirements, meaning that an increase in residential buildout would far exceed RHNA requirements beyond the need for additional residential development. This alternative would also impact non-residential development, which would potentially result in residents needing to drive further to access commercial goods and services that would be located outside the General Plan area. The potential alternative would also lead to additional significant impacts in other resource areas, such as construction-related Air Quality and operational-related Transportation impacts.

- 2. The City considered a potential "Reduced Commercial" alternative that would reduce non-residential commercial buildout throughout the General Plan area compared to the proposed plan. This alternative would not support maintaining of adequate public safety funding or economic viability diversity and sustainability (i.e., reduced sales tax collected from non-residential land uses). Furthermore, this alternative would also potentially increase vehicle miles traveled, as residents and employees would likely need to travel further to access commercial centers and employment centers located further away within the General Plan area or outside of the General Plan area.
- 3. The City considered a potential "Reduced Residential" alternative that would entail a maximum net new residential buildout of 1,500 dwelling units resulting in a 31,695-population decrease compared to the proposed plan. This potential alternative could help meet the project objective to encourage smart and sensitive development within the City. However, this reduction of residential buildout would not meet the RHNA requirements, which would result in this potential alternative not meeting overall project objectives. This potential alternative would also not account for the natural increase of population and resulting housing need, resulting in a significant and unavoidable impact related to land use planning.

5.9 Environmentally Superior Alternative

CEQA Guidelines Section 15126(e)(2) requires identification of an environmentally superior alternative. If the "No Project" Alternative is environmentally superior, CEQA requires selection of the "environmentally superior alternative other than the No Project Alternative" from among the proposed plan and the alternatives evaluated.

5.9.1 Alternative Impacts and Meeting Objectives Comparison

To identify the environmentally superior alternative in accordance with the CEQA Guidelines, Table 5-2 presents a comparison of the impacts related to the alternatives and indicates whether each alternative's environmental impact is greater than, lesser than, or similar to that of the proposed plan for each of the topic areas that were analyzed.

Table 5-2 Summary of Alternatives' Impacts

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Issue	Proposed plan Impact Classification	Alternative 1 Impact Classification	Alternative 2 Impact Classification	Alternative 3 Impact Classification
Aesthetics	LTSM	LTSM (Lesser)	LTSM (Greater)	LTSM (Lesser)
Air Quality	LTSM	LTSM (Lesser)	LTSM (Similar)	LTSM (Similar)
Biological, Agriculture, and Forestry Resources	LTSM	LTSM (Similar)	LTSM (Similar)	LTSM (Similar)
Cultural and Tribal Cultural Resources	SU	SU (Lesser)	SU (Lesser)	SU (Similar)
Geology, Soils, and Mineral Resources	LTSM	LTSM (Greater)	LTSM (Similar)	LTSM (Lesser)
Greenhouse Gas Emissions and Energy	SU	SU (Lesser)	SU (Similar)	SU (Lesser)
Hazards, Hazardous Materials, and Wildfire	SU	SU (Similar)	LTSM (Lesser)	SU (Similar)
Hydrology and Water Quality	LTS	LTS (Similar)	LTS (Similar)	LTS (Lesser)
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Issue	Proposed plan Impact Classification	Alternative 1 Impact Classification	Alternative 2 Impact Classification	Alternative 3 Impact Classification
Land Use Planning, Population, and Housing	LTS	LTSM (Greater)	LTS (Similar)	LTSM (Greater)
Noise	SU	SU (Similar)	SU (Similar)	SU (Similar)
Public Services and Recreation	SU	LTS (Lesser)	SU (Similar)	SU (Similar)
Transportation	SU	SU (Greater)	SU (Lesser)	SU (Lesser)
Utilities and Service Systems	SU	SU (Lesser)	SU (Similar)	SU (Similar)
Notes: NI = No Impact; LTS = Les	s than Significant; L	TSM = Less than Signifi	cant with Mitigation; SU = Signi	ficant and Unavoidable

Alternative 1 Comparison to Proposed Plan Summary

The Buildout of Adopted General Plan Alternative would generally result in lesser impacts compared to the proposed plan (see Table 5-2). By not having any planned construction or new operational activities, compared to the proposed plan, Alternative 1 would result in lesser impacts related to aesthetics, air quality, cultural resources, greenhouse gas emission and energy, public services and recreation, and utilities and service systems. Alternative 1 would have similar impact levels compared to the proposed plan related to biological, agricultural, and forestry resources, GHG emissions, hazards, hazardous materials, and wildfire, hydrology and water quality, and noise. Impacts related to geology, soils, and mineral resources as well as land use planning, population, and housing would be greater compared to the proposed plan. However, Alternative 1 would not meet the plan's objectives, as it would not increase the residential and community opportunities or facilitate identified needed development in the proposed General Plan area, thus not meeting the current RHNA. It would also not incorporate any of the mitigation or preventative measures that the proposed plan would incorporate.

Alternative 2 Comparison to Proposed Plan Summary

The Increased Intensity in Non-western Areas Alternative would generally result in overall similar environmental impacts compared to the proposed plan (see Table 5-2). By increasing development intensity in the central and eastern portions of the General Plan area, Alternative 2 would result in lesser impacts related to cultural resources and transportation.. However, due to the increase in FAR, Alternative 2 would result in greater impacts related to aesthetics compared to the proposed plan. Alternative 2 would also have similar impact levels compared to the proposed plan on wildfire. Overall, this alternative would advance the proposed plan objectives to provide barrier-free mobility and encourage smart development throughout the General Plan area, due to having a similar development footprint with incorporation of the proposed 2040 General Plan.

Alternative 3 Comparison to Proposed Plan Summary

The 25 Percent Residential Reduction Alternative would generally result in similar and lesser environmental impacts compared to the proposed plan (see Table 5-2). Alternative 3 would result in lesser impacts related to aesthetics, geology, soils, and mineral resources, GHG emissions, hydrology, and transportation. However, due to the decrease in residential availability, Alternative 3 would result in greater impacts related to land use planning, population, and housing compared to the proposed plan. This alternative would advance the smart and sensitive development and barrier-free mobility objectives of the proposed plan, due to the decrease in development resulting

in lesser impacts and providing more potential development opportunities throughout the General Plan area. However, Alternative 3 would not advance the overall land use and housing options diversity objective of the proposed plan, due to the decrease in residential units limiting opportunity for housing diversity.

5.9.2 Identification of Environmentally Superior Alternative

Based on the alternatives analysis provided in this EIR chapter, the Adopted General Plan Buildout Alternative (Alternative 1) is the environmentally superior alternative, as it would either be similar to or lessen the severity of most impacts of the proposed plan. However, it would not meet proposed plan objectives without any development or policy additions regarding improvements. If the "No Project" Alternative is determined to avoid or reduce more impacts than any other alternative, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (*CEQA Guidelines* Section 15126.6[e]).

The Increased Intensity in Non-western Areas Alternative (Alternative 2) would further reduce impacts compared to the 25 Percent Residential Reduction Alternative (Alternative 3) due to this alternative avoiding significant and unavoidable impacts to wildfire. Comparatively, while most Alternative 3 impacts are similar in significance to the proposed plan but would not meet most plan objectives, Alternative 2 would meet the proposed plan objectives and it would also avoid the significant and unavoidable wildfire exposure risk impact.

The 25 Percent Residential Reduction Alternative (Alternative 3) would have some lesser impacts (aesthetics, geology, GHG emissions, and hydrology) compared to the Increased Intensity in Nonwestern Areas Alternative (Alternative 2) but not to the extent of reducing the significance level of impact. In addition, while the proposed project objectives would be met under Alternative 2, Alternative 3 would advance only the project objectives to encourage smart and sensitive development and provide barrier-free mobility due to the decrease in residential units.

Overall, of the other alternatives evaluated in this EIR chapter, the Increased Intensity in Non-western Areas Alternative (Alternative 2) would be the environmentally superior alternative.

City of Pleasant Hill Pleasant Hill 2040 General Plan		
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