Appendix A: City of Milpitas General Plan 2040

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DRAFT ENVIRONMENTAL IMPACT REPORT

FOR THE

MILPITAS GENERAL PLAN UPDATE

NOVEMBER 2, 2020

Prepared for:

City of Milpitas
Planning Department
455 East Calaveras Boulevard
Milpitas, CA 95035

Prepared by:

De Novo Planning Group
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(916) 580-9818

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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DRAFT EIR

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PURPOSE

The City of Milpitas (City), as Lead Agency, determined that the 2040 Milpitas General Plan project (2040 General Plan, General Plan, or Project) is a "project" within the definition of the California Environmental Quality Act (CEQA), and, therefore, requires the preparation of an Environmental Impact Report (EIR). This Draft EIR has been prepared to evaluate the environmental impacts associated with implementation of the Project. This EIR is designed to fully inform decision-makers in the City, other responsible and trustee agencies, and the general public of the potential environmental consequences of approval and implementation of the General Plan. A detailed description of the proposed Project, including the components and characteristics of the Project, project objectives, and how the EIR will be used, is provided in Chapter 2.0 (Project Description).

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the project that are known to the City, either raised during the Notice of Preparation (NOP) scoping process or raised during preparation of the Draft EIR. This Draft EIR addresses the potentially significant impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, geology, greenhouse gas emissions and energy, hazards and hazardous materials, hydrology and water quality, land use planning and population/housing, mineral resources, noise, public services and recreation, transportation, utilities and service systems, wildfire, and cumulative impacts.

During the NOP process, six comment letters were received from interested agencies and organizations. The comments are summarized in Chapter 1.0 (Introduction), and are also provided in Appendix A.

ALTERNATIVES TO THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to describe a reasonable range of alternatives to the project or to the location of the project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the proposed project. The alternatives analyzed in this EIR include the following:

- **Alternative 1: No Project Alternative**. Under Alternative 1, the City would not adopt the General Plan Update. The existing Milpitas General Plan would continue to be implemented and no changes to the General Plan, including the Land Use Map, Circulation Diagram, goals, policies, or actions would occur. Subsequent projects, such as amending the Municipal Code (including the zoning map) and the City's Design Guidelines, would not occur. The Existing General Plan Land Use Map is shown on Figure 5.0-1.

- **Alternative 2: Modified Project Alternative**. Under Alternative 2, the City would adopt the updated General Plan policy document, but would retain the existing Land Use Map. This alternative would result in the same growth as the existing General Plan and Alternative 1,

but would implement the updated goals, policies, and actions found in the General Plan Update. This Alternative would result in less residential and non-residential growth than the proposed project or Alternative 3. This alternative was developed to potentially reduce the severity of significant impacts associated with noise, as well as the potential further reduction in less than significant impacts related to aesthetics, biological resources, cultural resources, air quality, public services, and utilities.

- **Alternative 3: Increased Residential Density Alternative**. Alternative 3 would adopt the General Plan Update, including the proposed General Plan Land Use Map and updated goals, policies, and actions. However, Alternative 3 would place more emphasis on residential development, increasing the allowed densities for the residential land uses. This Alternative would result in a 15 percent increase in the number of new residential dwelling units when compared to the proposed project, resulting in more dwelling units than the other Alternatives. This Alternative would also result in more non-residential growth than Alternatives 1 and 2, but the same non-residential growth as the proposed Project. This alternative was developed to potentially reduce the severity impacts related to greenhouse gas emissions and transportation, as most new development would be within close proximity to transit and in urban build up areas, or part of a mixed use area which would help to reduce per capita VMT. Figure 2.0-3 of Chapter 2 (Project Description) shows the proposed General Plan Land Use Map.

A comparative analysis of the proposed project and each of the project alternatives is provided in Table ES-1 below. The table includes a numerical scoring system, which assigns a score of 1 to 5 to each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of "3" indicates that the alternative would have the same level of impact when compared to the proposed project. A score of "1" indicates that the alternative would have a better (or reduced) impact when compared to the proposed project. A Score of "2" indicates that the alternative would have a slightly better (or slightly reduced) impact when compared to the proposed project. A score of "4" indicates that the alternative would have a slightly worse (or slightly increased) impact when compared to the proposed project. A score of "5" indicates that the alternative would have a worse (or increased) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

TABLE ES-1: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	*PROPOSED PROJECT*	*ALTERNATIVE 1 (NO PROJECT)*	*ALTERNATIVE 2 (MODIFIED)*	*ALTERNATIVE 3 (INCREASED DENSITY)*
Aesthetics	3 – Same	2 – Slightly Better	2 – Slightly Better	4 – Slightly Worse
Agricultural Resources	3 – Same	3 – Same	3 – Same	3 - Same
Air Quality	3 – Same	5 – Worse	4 – Slightly Worse	3 – same
Biological Resources	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Cultural Resources	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Geology and Soils	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Greenhouse Gases, Climate Change, and Energy	3 – Same	5 – Worse	4 – Slightly Worse	2 – Slightly Better
Hazards and Hazardous Materials	3 – Same	2 – Slightly Better	2 – Slightly Better	4 – Slightly Worse

ENVIRONMENTAL ISSUE	*PROPOSED PROJECT*	*ALTERNATIVE 1 (NO PROJECT)*	*ALTERNATIVE 2 (MODIFIED)*	*ALTERNATIVE 3 (INCREASED DENSITY)*
Hydrology and Water Quality	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Land Use and Population	3 – Same	4 – Slightly Worse	4 – Slightly Worse	3 – Same
Noise	3 – Same	2 – Slightly Better	2 – Slightly Better	4 – Slightly Worse
Public Services and Recreation	3 – Same	2 – Slightly Better	2 – Slightly Better	3 – Same
Transportation and Circulation	3 – Same	4 – Slightly Worse	4 – Slightly Worse	3 – Same
Utilities	3 – Same	2 – Slightly Better	2 – Slightly Better	3 – Same
Wildfire	3 – Same	3 – Same	3 – Same	3 – Same
Irreversible Effects	3 – Same	2 – Slightly Better	2 – Slightly Better	3 – Same
SUMMARY	**48**	**52**	**46**	**50**

As shown in Table ES-1, Alternative 2 (Reduced Mixed Growth Alternative) is the environmentally superior alternative when looked at in terms of all potential environmental impacts. While Alternative 3 has the same score as the Proposed General Plan, Alternative 3 fails to reduce the severity of any of the significant and unavoidable impacts of the proposed Project and scores lower compared to Alternative 2. All of the alternatives fail to reduce any significant and unavoidable impacts to a less than significant level. Throughout the preparation of the General Plan Update, the City Council, Planning Commission, and GPAC all expressed a desire and commitment to ensuring that the General Plan not only reflects the community's values and priorities, but also serves as a self-mitigating document and avoid significant environmental impacts to the greatest extent feasible. To that end, the proposed General Plan includes the fully range of feasible mitigation available to reduce potential impacts to the greatest extent possible.

Overall, Alternative 2 is the environmentally superior alternative as it is the most effective in terms of overall reductions of impacts compared to the proposed General Plan and all other alternatives. As such, Alternative 2 is the environmentally superior alternative for the purposes of this EIR analysis. Additionally, similar to the Proposed General Plan, Alternative 2 meets most project objectives. Like the proposed project, Alternative 2 reflects the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders; addresses issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders; protects Milpitas's family-oriented environment, character, and sense of community; continues to maintain the road network and improve multimodal transportation opportunities; maintains strong fiscal sustainability; continues to provide efficient and adequate public services; and addresses new requirements of State law. However, without the updated Land Use Map Alternative 2 provides less high-quality housing options; and doesn't not meet the General Plan's Objectives to attract and retain businesses and industries that provide high-quality and high-paying jobs when compared to the proposed Projects Innovation Area, and Business Park Research and Development land uses to address emerging employment needs and trends. Additionally an objective of the General Plan is to expand and improve neighborhood serving shopping areas to provide better local services near neighborhoods. The proposed Project does this through newly established commercial and mixed use areas included within the Neighborhood Commercial, and Neighborhood Commercial Mixed-Use land use designations that Alternative 2 would not implement. Thus Alternative 2 fails to meet

all project objectives as it retains of the existing land use map and designations that are central to the proposed Project's objectives.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the Project's significant effects on the environment. The CEQA Guidelines defines a significant effect as a substantial adverse change in the physical conditions which exist in the area affected by the proposed Project. A less than significant effect is one in which there is no long- short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of mitigation measures and/or compliance with regulations. "Beneficial" effect is not defined in the CEQA Guidelines, but for purposes of this EIR a "beneficial" effect is one in which an environmental condition is enhanced or improved. CEQA defines Cumulatively Considerable to mean incremental effects of an individual project that are considerable when viewed in connection with the effects of past projects, other current projects, and future projects. Significant and Unavoidable describes significant impacts for which mitigation to reduce the significant impact to a less-than-significant level is not available or feasible. A potentially significant impact is identified where a Project may cause a substantial adverse change in the environment. A project impact is considered potentially significant if the Project is anticipated to exceed identified standards of significance thereby result in in a substantial adverse change in the physical conditions of the environment. In instances where potentially significant impacts are identified, the EIR must consider whether mitigation measures or alternatives to the Project that would reduce those impacts. The environmental impacts of the proposed Project, the impact level of significance are summarized in Table ES-2.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
AESTHETICS			
Impact 3.1-1: General Plan implementation would not have a substantial adverse effect on a scenic vista	LS	*None Required*	LS
Impact 3.1-2: General Plan implementation would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway	LS	*None Required*	LS
Impact 3.1-3: General Plan implementation would not, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality	LS	*None Required*	LS
Impact 3.1-4: General Plan implementation could result in the creation of new sources of nighttime lighting and daytime glare	LS	*None Required*	LS
AGRICULTURAL AND FOREST RESOURCES			
Impact 3.2-1: General Plan implementation would result in the conversion of farmlands, including Prime Farmland and Unique Farmland, to non-agricultural use	LS	*None Required*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.2-2: General Plan implementation would not result in conflicts with existing zoning for agricultural use, or a Williamson Act contract	LS	*None Required*	LS
Impact 3.2-3: Result in the loss of forest land or conversion of forest land to non-forest	LS	*None Required*	LS
Impact 3.2-4: General Plan implementation would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use	LS	*None Required*	LS
AIR QUALITY			
Impact 3.3-1: General Plan implementation would not conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of criteria pollutants	LS	*None Required*	LS
Impact 3.3-2: General Plan implementation would expose sensitive receptors to substantial pollutant concentrations	LS	*None Required*	LS
Impact 3.3-3: General Plan implementation would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people)	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
BIOLOGICAL RESOURCES			
Impact 3.4-1: General Plan implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	LS	*None Required*	LS
Impact 3.4-2: General Plan implementation could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	LS	*None Required*	LS
Impact 3.4-3: General Plan implementation could 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	LS	*None Required*	LS
Impact 3.4-4: General Plan implementation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.4-5: The General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	LS	*None Required*	LS
Impact 3.4-6: General Plan implementation would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan	LS	*None Required*	LS
CULTURAL RESOURCES			
Impact 3.5-1: General Plan implementation could cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to Section15064.5	LS	*None Required*	LS
Impact 3.5-2: Implementation of the General Plan could lead to the disturbance of any human remains	LS	*None Required*	LS
Impact 3.5-3: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074, 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 a resource determined by the lead agency	LS	*None Required*	LS

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GEOLOGY			
Impact 3.6-1: General Plan implementation has the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides	LS	*None Required*	LS
Impact 3.6-2: General Plan implementation has the potential to result in substantial soil erosion or the loss of topsoil	LS	*None Required*	LS
Impact 3.6-3: General Plan implementation has the potential to result in development 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	LS	*None Required*	LS
Impact 3.6-4: General Plan implementation has the potential to result in development on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	LS	*None Required*	LS
Impact 3.6-5: General Plan implementation does not have the potential to have soils incapable of adequately supporting the use of septic tanks or	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
alternative waste water disposal systems where sewers are not available for the disposal of waste water			
Impact 3.6-6: General Plan implementation has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	LS	*None Required*	LS
GREENHOUSE GASES, CLIMATE CHANGE, AND ENERGY			
Impact 3.7-1: General Plan implementation has the potential to generate GHG emissions that could have a significant impact on the environment	LS	*None Required*	LS
Impact 3.7-2: General Plan implementation has the potential to conflict with adopted plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions	LS	*None Required*	LS
Impact 3.7-3: General Plan implementation has the potential to result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency	LS	*None Required*	LS
HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.8-1: General Plan implementation has the potential to create a significant hazard to the	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment			
Impact 3.8-2: General Plan implementation has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LS	*None Required*	LS
Impact 3.8-3: General Plan implementation has the potential to have projects located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	LS	*None Required*	LS
Impact 3.8-4: General Plan implementation is not located within an airport land use plan, two miles of a public airport or public use airport, and would not result in a safety hazard for people residing or working in the project area	LS	*None Required*	LS
Impact 3.8-5: General Plan implementation has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LS	*None Required*	LS
Impact 3.8-6: General Plan implementation has the potential to expose people or structures to a	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
significant risk of loss, injury or death involving wildland fires			
HYDROLOGY AND WATER QUALITY			
Impact 3.9-1: General Plan implementation could violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality or obstruct implementation of a water quality control plan	LS	*None Required*	LS
Impact 3.9-2: General Plan implementation could result in the depletion of groundwater supplies or interfere substantially with groundwater recharge or conflict with a groundwater management plan	LS	*None Required*	LS
Impact 3.9-3: General Plan implementation could alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, impeded flows, or polluted runoff	LS	*None Required*	LS
Impact 3.9-4: General Plan implementation would not release pollutants due to project inundation by flood hazard, tsunami, or seiche	LS	*None Required*	LS
LAND USE PLANNING AND POPULATION/HOUSING			

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.10-1: General Plan implementation would not physically divide an established community	LS	*None Required*	LS
Impact 3.10-2: General Plan implementation would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	LS	*None Required*	LS
Impact 3.10-3: General Plan implementation would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	LS	*None Required*	LS
Impact 3.10-4: General Plan implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	LS	*None Required*	LS
MINERAL RESOURCES			
Impact 3.11-1: General Plan implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	LS	*None Required*	LS
Impact 3.11-2: General Plan implementation would not result in the loss of availability of a locally-important mineral resource recovery site	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
delineated on a local general plan, specific plan or other land use plan			
NOISE			
Impact 3.12-1: General Plan implementation may result in exposure to significant traffic noise sources	PS	*Mitigated to the greatest extent feasible through General Plan Policies and Actions. No additional feasible mitigation is available.*	SU
Impact 3.12-2: General Plan implementation may result in exposure to excessive railroad noise sources	LS	*None Required*	LS
Impact 3.12-3: Implementation of the General Plan could result in the generation of excessive stationary noise sources	LS	*None Required*	LS
Impact 3.12-4: General Plan implementation may result in an increase in construction noise sources	LS	*None Required*	LS
Impact 3.12-5: General Plan implementation may result in construction vibration	LS	*None Required*	LS
Impact 3.12-6: General Plan implementation may result in exposure to groundborne vibration	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
PUBLIC SERVICES AND RECREATION			
Impact 3.13-1: General Plan implementation could result in adverse physical impacts on the environment associated with the need for new governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts and the provision of public services	LS	*None Required*	LS
Impact 3.13-2: General Plan implementation may result in adverse physical impacts associated with the deterioration of existing parks and recreation facilities or the construction of new parks and recreation facilities	LS	*None Required*	LS
TRANSPORTATION			
Impact 3.14-1: General Plan implementation would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	LS	*None Required*	LS
Impact 3.14-2: General Plan implementation would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a)	PS	*Mitigated to the greatest extent feasible through General Plan Policies and Actions. No additional feasible mitigation is available.*	SU

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Impact 3.14-3: General Plan implementation would not substantially increase hazards due to a geometric design feature or incompatible use	LS	*None Required*	LS
Impact 3.14-4: General Plan implementation would not result in inadequate emergency access	LS	*None Required*	LS
UTILITIES AND SERVICE SYSTEMS			
Impact 3.15-1: General Plan implementation would result in sufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years	LS	*None Required*	LS
Impact 3.15-2: General Plan implementation may require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	*None Required*	LS
Impact 3.15-3: General Plan implementation has the potential to 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	LS	*None Required*	LS
Impact 3.15-4: General Plan implementation may require or result in the relocation or construction of new or expanded wastewater facilities, the	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
construction or relocation of which could cause significant environmental effects			
Impact 3.15-5: General Plan implementation may require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects	LS	*None Required*	LS
Impact 3.15-6: General Plan implementation would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals	LS	*None Required*	LS
WILDFIRES			
Impact 3.16-1: General Plan implementation could substantially impair an adopted emergency response plan or emergency evacuation plan	LS	*None Required*	LS
Impact 3.16-2: General Plan implementation would not exacerbate wildfire risks, or thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire	LS	*None Required*	LS
Impact 3.16-3: Require the installation or maintenance of associated infrastructure (such as	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
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			
Impact 3.16-4: 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	LS	*None Required*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
OTHER CEQA-REQUIRED TOPICS			
Impact 4.1: Cumulative degradation of the existing visual character of the region	LS	*None Required*	LCC
Impact 4.2: Cumulative impact to agricultural lands and resources	LS	*None Required*	LCC
Impact 4.3: Cumulative impact on the region's air quality	LS	*None Required*	LCC
Impact 4.4: Cumulative loss of biological resources, including habitats and special status species	LS	*None Required*	LCC
Impact 4.5: Cumulative impacts on known and undiscovered cultural resources	LS	*None Required*	LCC
Impact 4.6: Cumulative impacts related to geology and soils	LS	*None Required*	LCC
Impact 4.7: Cumulative impacts related to greenhouse gases, climate change, and energy	LS	*None Required*	LCC
Impact 4.8: Cumulative impacts related to hazardous materials and human health risks	LS	*None Required*	LCC
Impact 4.9: Cumulative impacts related to hydrology and water quality	LS	*None Required*	LCC
Impact 4.10: Cumulative impacts related to local land use, population, and housing	LS	*None Required*	LCC

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION* AND *MINIMIZATION MEASURES*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 4.11: Cumulative impacts related to mineral resources	LS	*None Required*	LCC
Impact 4.12: Cumulative impacts related to noise	PS	*Mitigated to the greatest extent feasible through General Plan Policies and Actions. No additional feasible mitigation is available.*	CC/SU
Impact 4.13: Cumulative impacts to public services and recreation	LS	*None Required*	LCC
Impact 4.14: Cumulative impacts on the transportation network	PS	*Mitigated to the greatest extent feasible through General Plan Policies and Actions. No additional feasible mitigation is available.*	CC/SU
Impact 4.15: Cumulative impacts related to utilities	LS	*None Required*	LCC
Impact 4.16: Cumulative impact related to wildfire	LS	*None Required*	LCC
Impact 4.17: Irreversible Effects	PS	*Mitigated to the greatest extent feasible through General Plan Policies and Actions. No additional feasible mitigation is available.*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *SU – significant and unavoidable*

1.1 INTRODUCTION

In 2016, the City of Milpitas embarked on multi-year process to update the City's General Plan. The General Plan is the overarching policy document that guides land use, housing, transportation, infrastructure, community design, and other policy decisions. State law requires every city and county in California to prepare and maintain a general plan planning document. The General Plan is the City's "constitution" or "blueprint" for future development of the city and provides the policy guidance for achieving the community's vision.

As part of the General Plan Update process, a General Plan Existing Conditions Report was prepared to establish a baseline of existing conditions in the city. Additionally, Issues and Opportunities memos, and a Land Use Alternatives Report were prepared to identify the challenges facing the community, to provide an opportunity for citizens and policymakers to come together in a process of developing a common vision for the future, and to identify a range of land use options available to the City as the General Plan Land Use Map was modified and updated.

The updated Milpitas General Plan includes a framework of goals, policies, and actions that will guide the community toward its common vision and is supported by an updated General Plan Land Use Map.

MILPITAS GENERAL PLAN UPDATE

General Plan Policy Document

The Policy Document contains the goals, policies, and strategies related to various elements of the General Plan. The General Plan must address at least seven elements - or issue categories - to the extent that they are relevant locally. These state-mandated elements include: land use, circulation, housing, open space, conservation, noise, and safety. In addition to the state-mandated elements the State provides additional requirements for topical areas for the general plan to address, for example: climate resilience and adaptation, and environmental justice. The City may also address other topics of community interest in the General Plan, such as economic development, community health and wellness, utilities and services, and sustainability. The General Plan sets out the goals, policies, and action items in each of these areas and serves as a policy guide for how the City will make key planning decisions in the future. It also identifies how the City will interact with Santa Clara County, adjacent and nearby cities, and other local, regional, State, and Federal agencies.

The Policy Document contains the goals and policies that will guide future decisions within the city. It also identifies action programs that will ensure the goals and policies in the General Plan are carried out. As part of the General Plan Update, the City and the consultant team also prepared several supporting documents that serve as the building blocks for the Policy Document. A description of these reports is as follows:

Existing Conditions Report

As part of the General Plan Update process, the Existing Conditions Report establishes a baseline of existing conditions in the city. To prepare a meaningful General Plan, existing conditions must be understood and documented. The Existing Conditions Report identifies development patterns, natural resources, socioeconomic conditions, and environmental constraints in the city, and identifies the regulatory environment for each topic. This report is a resource for the City Council, Planning Commission, public, General Plan Advisory Committee (GPAC), City staff, and the De Novo Planning Group team for the General Plan Update and Environmental Impact Report (EIR). The Existing Conditions Report makes extensive use of maps and graphics to help make it accessible to the general public. The Existing Conditions Report provides background data and serves as a technical framework, while the General Plan will focus on goals, policies, and action programs. The Existing Conditions Report is available online at: https://milpitas.generalplan.org/content/documents-and-maps

Milpitas Community Profile

To prepare a meaningful General Plan, existing conditions must be understood and documented. This Community Profile (pdf) summarizes key aspects of the existing conditions report into a user-friendly format that summarizes key development patterns, natural resources, socioeconomic conditions, and environmental constraints in the city that must be considered when charting the course for Milpitas's future. The Community Profile is available on the project website: https://milpitas.generalplan.org/content/documents-and-maps

Issues and Opportunities

Based on public input from community surveys, information contained in the Existing Conditions Report, initial General Plan Advisory Committee meetings, and initial input provided by the City Council, the Issues and Opportunities memos identify key issues and opportunities to be addressed in the General Plan and summarize input provided by stakeholders. The Issues and Opportunities memos provide the public, the General Plan Advisory Committee, the Planning Commission, and the City Council with tools and information for the development of the General Plan Policy Document and associated Land Use and Circulation Maps. The Issues and Opportunities memos are included within the GPAC meeting memos as they relate to individual general plan topic areas. Meeting memos are available on the project website: https://milpitas.generalplan.org/content/meetings-and-events

Land Use Alternatives Report

This report presents several different Land Use Map alternatives. An analysis of the land use, circulation, fiscal viability, economic development, and public services and infrastructure effects relative to each alternative is provided. The Alternatives Report is available online at: https://milpitas.generalplan.org/content/documents-and-maps

Environmental Impact Report

An EIR responds to the requirements of the California Environmental Quality Act (CEQA) as set forth in Sections 15126, 15175, and 15176 of the CEQA Guidelines. The Planning Commission and City Council will use the EIR during the General Plan Update process in order to understand the potential environmental implications associated with implementing the General Plan. This EIR was prepared concurrently with the General Plan policy document in order to facilitate the development of a General Plan that is largely self-mitigating. In other words, as environmental impacts associated with the new General Plan, including the Land Use Map, were identified; policies and actions were incorporated into the General Plan policy document in order to reduce or avoid potential environmental impacts.

1.2 PURPOSE OF THE EIR

The City of Milpitas, as lead agency, determined that the Milpitas General Plan Update is a "Project" within the meaning of CEQA. CEQA requires the preparation of an EIR prior to approving any project that may have a significant impact on the environment. For the purposes of CEQA, the term "Project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

This Draft EIR has been prepared according to CEQA requirements to evaluate the potential environmental impacts associated with the implementation of the Milpitas General Plan. A copy of the Public Draft General Plan is located on the Milpitas General Plan Update website, at: https://milpitas.generalplan.org/. The Draft EIR also discusses alternatives to the General Plan, and proposes mitigation measures that will offset, minimize, or otherwise avoid potentially significant environmental impacts. This Draft EIR has been prepared in accordance with CEQA, California Resources Code Section 21000 et seq.; the Guidelines for the California Environmental Quality Act (California Code of Regulations, Title 14, Chapter 3); and the rules, regulations, and procedures for implementing CEQA as adopted by the City of Milpitas.

An EIR must disclose the expected direct and indirect environmental impacts associated with a Project, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed Project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize significant environmental impacts of proposed development.

1.3 TYPE OF EIR

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. Section 15168 states:

> "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 connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or
4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."

The program-level analysis considers the broad environmental effects of the proposed Project. This EIR may be used to evaluate subsequent projects and activities under the proposed Project. This EIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the proposed Project, but not necessarily to the level of detail to consider approval of subsequent development projects that may occur after adoption of the General Plan.

Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the General Plan and the analysis in this EIR, as required under CEQA. It may be determined that some future projects or infrastructure improvements may be exempt from environmental review. When individual subsequent projects or activities under the General Plan are proposed, the lead agency that would approve and/or implement the individual project will examine the projects or activities to determine whether their effects were adequately analyzed in this Program EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this EIR, no further CEQA compliance would be required.

1.4 INTENDED USES OF THE EIR

The City of Milpitas, as the lead agency, has prepared this EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the Milpitas General Plan and subsequent implementation of projects consistent with the General Plan. The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the General Plan. Subsequent actions that may be associated with the General Plan are identified in Chapter 2.0, Project Description. This EIR may also be used by other local regional agencies.

1.5 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386). While no Responsible Agencies or Trustee Agencies are responsible for approvals associated with adoption of the Milpitas General Plan, implementation of future projects within Milpitas may require permits and approvals from such agencies, which may include the following:

- California Department of Fish and Wildlife (CDFW);
- California Department of Transportation (Caltrans);
- Regional Water Quality Control Board (RWQCB);
- U.S. Army Corps of Engineers (ACOE);
- U.S. Fish and Wildlife Service (USFWS);
- Santa Clara County Local Agency Formation Commission (LAFCO);
- Association of Bay Area Governments (ABAG);
- Metropolitan Transportation Commission (MTC); and
- Bay Area Air Quality Management District (BAAQMD).

1.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City of Milpitas circulated a Notice of Preparation (NOP) of an EIR for the proposed project on July 17, 2020 to trustee and responsible agencies, the State Clearinghouse, and the public. A scoping meeting was held on August 11, 2020. During the 30-day public review period for the NOP, which ended on August 17, 2020, 6 written comment letters were received on the NOP. The NOP and all comments received on the NOP are presented in Appendix A.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of the project's direct and indirect impacts on the environment and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City of Milpitas will file the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

Concurrent with the NOC, the City of Milpitas will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR will be accepted in written form to the address below or by email. All comments or questions regarding the Draft EIR should be directed to:

Jessica Garner, Planning Manager
City of Milpitas
Department of Planning and Neighborhood Services
455 East Calaveras Boulevard
Milpitas, CA 95035
email: jgarner@ci.milpitas.ca.gov
Phone: (408) 586-3284

Due to the ongoing Covid-19 situation, City Hall is currently closed. As such, commenters are strongly encouraged to submit written comments via email.

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to both oral and written comments received during the public review period and include any minor changes to the DEIR in the form of an errata.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City of Milpitas City Council will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete" pursuant to CEQA Guidelines Section 15151, the City Council may certify the Final EIR in accordance with CEQA. As set forth by CEQA Guidelines Section 15151, the standards of adequacy require an EIR to provide a sufficient degree of analysis to allow decisions to be made regarding the proposed project that intelligently take account of environmental consequences.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or deny the project. If the EIR determines that the Project would result in significant adverse impacts to the environment that cannot be mitigated to less than significant levels, the City Council would be required to adopt a statement of overriding considerations as well as written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. If additional mitigation measures are required (beyond the General Plan policies and actions that reduce potentially significant impacts, as identified throughout this EIR), a Mitigation Monitoring and Reporting Program (MMRP) would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. The MMRP would be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

1.7 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures for any significant impacts, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The EIR prepared reviews environmental and planning documentation developed for the project, environmental and planning documentation prepared for recent projects located within the city of Milpitas, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed project.

CHAPTER 1.0 - INTRODUCTION

Chapter 1.0 briefly describes the proposed project, the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, identifies the scope and organization of the Draft EIR, and briefly summarizes comments received on the NOP.

CHAPTER 2.0 - PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed Project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, subsequent projects and activities, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic,

identification of appropriate mitigation measures, and a conclusion as to the significance of each impact. The following environmental topics are addressed in this section:

- Aesthetic Resources
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology, Soils, and Mineral Resources
- Greenhouse Gases, Climate Change, and Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utilities/Service Systems
- Wildfire
- Mandatory Findings of Significance/Cumulative Impacts

CHAPTER 4.0 - OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative impacts, and significant and unavoidable environmental effects.

CHAPTER 5.0 - ALTERNATIVES

Chapter 5.0 provides a comparative analysis between the merits of the proposed Project and the selected alternatives. State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project.

CHAPTER 6.0 – REPORT PREPARERS AND REFERENCES

Chapter 6.0 lists authors and agencies that assisted in the preparation of the Draft EIR, by name, title, and company or agency affiliation.

CHAPTER 7.0 - REFERENCES

Chapter 7.0 lists referenced materials for studies and reposts and informational materials that were consulted during preparation of the DEIR.

APPENDICES

This section includes all notices and other procedural documents pertinent to the Draft EIR, as well as technical material prepared to support the analysis.

1.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received 6 comment letters on the NOP. Copies of these letters are provided in Appendix A of this Draft EIR and the comments are summarized below.

- Native American Heritage Commission: The Native American Heritage Commission provided direction regarding cultural resources and tribal consultation in accordance with Assembly Bill 52 and Senate Bill 18.
- California Department of Transportation (Caltrans): Caltrans suggested information to include in the EIR traffic study and provided input with respect to content of the General Plan related to travel demand and highway operations.
- California Department of Fish and Wildlife (CDFW): CDFW provided comments related to Impacts to Special-Status, Threatened and Protected Species, and impacts to resources critical habitats.
- Barbara Jo Navarro: Provided comments related to the DEIR process and requested additional information from City Staff.
- Frank Bush: provided comments related to development and use restrictions, traffic reviews, and the need for public input.
- Joseph P. Leung: provided commented related to densities allowed in certain land uses and the how these may be included by the market demand in Milpitas.

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2.1 BACKGROUND AND OVERVIEW

CALIFORNIA GENERAL PLAN LAW

State planning and zoning law (California Government Code Section 65000 et seq.) requires all counties and cities to prepare and maintain a general plan for the long-term growth, development, and management of the land within the jurisdiction's planning boundaries. The general plan acts as a "constitution" for development and is the jurisdiction's lead legal document in relation to growth, development, and resource management issues. Development regulations (e.g., zoning and subdivision standards) are required by law to be consistent with the general plan.

General plans must address a broad range of topics, including, at a minimum, the following mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. General Plans must also address the topics of environmental justice, climate change, and resiliency planning, either as separate elements or as part of other required elements. At the discretion of each jurisdiction, the general plan may combine these elements and may add optional elements relevant to the physical features of the jurisdiction.

General plans must also be comprehensive, internally consistent, and plan for the long term. The general plan should be clearly written, easy to administer, and available to all those concerned with the community's development.

State planning and zoning law also establishes that zoning ordinances are required to be consistent with the general plan and any applicable specific plans, area plans, master plans, and other related planning documents. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure consistency between the revised land use designations in the general plan (if any) and the permitted uses or development standards of the zoning ordinance (Gov. Code Section 65860, subd. [c]).

GENERAL PLAN UPDATE PROCESS

The Milpitas General Plan was last comprehensively updated in 1994. Several minor amendments have occurred since then. In January of 2002, the Land Use Element was updated to incorporate the Midtown Specific Plan, which included revisions to the General Plan Land Use Map and Land Use Element text for consistency between these documents. A June 2008 update incorporated the Transit Area Specific Plan, adding new land use designations and references to the area plan. The October 2010 update consisted of text amendments to integrate the City's Park and Recreation Master Plan and Milpitas Bikeway Master Plan, which includes land use designation changes to several creek channels and public right-of-ways, as well as other updates to exhibits, tables, and figures. The current Housing Element was adopted in 2015 covering the 2015-2023 housing cycle.

In 2016, the City of Milpitas embarked on a multi-year process to comprehensively update its General Plan. Specifically, the General Plan provides policy guidance on land use, housing, transportation, infrastructure, community design, conservation, and other development-related

topics. State law requires every city and county in California to prepare and maintain a general plan planning document.

USING THE GENERAL PLAN

The General Plan is used by the City Council, Planning Commission, and City staff on a regular basis to make decisions with direct and indirect land use implications. It also provides a framework for inter-jurisdictional coordination of planning efforts among officials and staff of the City and other government agencies such as the County and State and Federal agencies.

The General Plan is the basis for a variety of regulatory mechanisms and administrative procedures. California planning law requires consistency between the General Plan and its implementation programs. Implementation programs and regulatory systems of the General Plan include zoning and subdivision ordinances, capital improvement programs, specific plans, environmental impact procedures, and building and housing codes.

Over time, the City's population will change, its goals will be redefined, and the physical environment in which its residents live and work will be altered. In order for the General Plan to be a useful document, it must be monitored and periodically revised to respond to and reflect changing conditions and needs. As such, a general plan should be comprehensively updated approximately every 10 years to reflect current conditions and emerging trends.

The City's General Plan should also be user-friendly. To this end, the Milpitas General Plan Update will be divided into two primary documents: the Existing Conditions Report and the General Plan Goals and Policy document (or "General Plan").

The Existing Conditions Report provides a summary of a range of conditions in Milpitas and provides the baseline framework for the development of the General Plan's goals, policies, and implementation programs.

The General Plan Goals and Policies document is the essence of the General Plan. It contains the goals and policies that will guide future decisions within the City. It also identifies a full set of implementation programs that will ensure the goals and policies in the General Plan are carried out.

COMMUNITY OUTREACH AND PARTICIPATION

Gathering extensive public and community input was of paramount importance to the City of Milpitas during the development of the General Plan.

A brief summary of the community outreach and public participation process is provided below.

Outreach Objectives

Objectives established for the comprehensive outreach program are to:

- Educate the public on the City's history, existing conditions, socioeconomic trends, and fiscal health
- Develop a long-term vision for Milpitas

- Engage a broad spectrum of the City's community members
- Establish a greater connection to current planning issues

Visioning Workshops

In September, October, and November of 2016, the General Plan Update team held three public visioning workshops to help kick-off the General Plan Update process. City residents and stakeholders attended workshops at the Barbara Lee Senior Center Community Room at City Hall. The workshops provided an opportunity for the public to offer its thoughts on what it values about its community and the City, and what important issues should be addressed in updating the General Plan.

Each workshop included a presentation by the General Plan Update team that explained the role of the General Plan, an overview of the General Plan Update process, and an opportunity for the workshop participants to ask questions and seek clarification on the process and the role of the community. Workshop participants were asked to complete activities and exercises in order to provide information to the General Plan Update team. Each workshop focused on different themes and topics to be addressed in the General Plan. At each workshop, participants were provided an opportunity to identify where future land uses should be located within the community, ideas for community design, and transportation priorities. The maps prepared by the Visioning Workshop participants were reviewed and organized by theme, and major themes from the Visioning Workshop mapping activities were considered during the development of the land use Opportunity Areas.

General Plan Advisory Committee (GPAC)

The General Plan Advisory Committee (GPAC), which consisted of residents, homeowner's association representatives, business leaders, and representatives from the local school district, among others, collaborated with City staff and the General Plan Update team throughout the development of the General Plan. The Advisory Committee met 13 times between March 2017 and September 2020 to identify key issues and challenges that Milpitas will face over the next 20 years, refine the City's Land Use Map, and to develop the comprehensive set of goals and policies contained in the General Plan. Each General Plan Advisory Group meeting was open to the public. All meeting materials are available on the project website at: https://milpitas.generalplan.org

Potential changes to the Land Use Map have been discussed by the GPAC over the course of several meetings in the past two years. For example, during the May 30, 2018 GPAC meeting, the committee discussed the City's land use character and opportunities to enhance the community's identity through identification and further creation of community design elements. This included a collaborative experience where GPAC members identified possible Opportunity Areas for land use enhancements. Additionally, during the June 20, 2018 GPAC meeting, the committee discussed opportunities for economic development, increased local employment opportunities, and locations throughout the city where new job growth opportunities should be targeted. Information, direction, and feedback provided by the GPAC has been incorporated into the General Plan and Land Use Map.

City Council Input

The City Council received periodic briefings from City staff and the consultant team to review input and receive information relevant to the specific topics addressed at the GPAC meetings, and provide specific direction and guidance to staff and the consultant team regarding the Land Use Opportunity Areas Report and development of the preferred land use map/plan, which is analyzed in this Environmental Impact Report.

During the March 29, 2018 City Council Study Session Meeting, the Council provided direction on land use mapping concepts to be included and analyzed in the Land Use Alternatives Report. Ideas presented during this workshop included focusing on the enhancement and reimagining of select locations within the city, encouraging additional mixed-use development, and supporting job generation. This initial input led to the Land Use Opportunity Areas identified in the Land Use Alternatives Report. Based upon the input received through the outreach process, City staff and the consultant team developed a conceptual Opportunity Sites map that identifies where and how land use and development intensity changes could occur in order to realize the community's land use priorities.

Upon completion of the Land Use Alternatives Report, the Council directed the GPAC to provide recommendations to the Council as to their preferred land use map. During subsequent City Council meetings held between March and October of 2019, the City Council reviewed the GPAC's direction and input and provided direction relating to the preferred land use map that is analyzed in this Draft EIR.

Community Open Houses on Draft General Plan

A series of community outreach efforts are scheduled to coincide with the public review period for this Draft EIR.

Other Outreach Opportunities and Tools

For all public workshops and meetings, the City conducted extensive outreach, using a wide variety of methods and tools, to inform and encourage the community to participate in the General Plan Update process. The following is a list of methods and tools used to inform the public of meetings, workshops, and the status of the General Plan Update work efforts.

- General Plan Website: The City maintains a website (www.milpitas.generalplan.org) devoted to informing the public about, and encouraging participation in, the General Plan Update process. The website includes notices, all workshop materials, presentations given to the GPAC and City Council, background materials, draft policy documents, and draft versions of the General Plan Land Use Map.

- E-mail distribution list: This list was developed and maintained over time, and included agencies, organizations, stakeholders, and individuals.

- Social Media: The City posts meeting notices and project updates to its social media platforms, including NextDoor, and Facebook.

- Flyers: Flyers were posted at City Hall and at key locations throughout the community advertising the Visioning Workshops and online survey.

2.2 PROJECT LOCATION

REGIONAL SETTING

Incorporated in 1954, the City of Milpitas has become an integral part of high-tech Silicon Valley. Located at the southern end of the San Francisco Bay, the City is a strong employment center with a diverse population, quality schools, conveniently-located neighborhood parks, and a variety of retail options. Milpitas is often called the "Crossroads of Silicon Valley" with most of its 13.6 square miles of land situated between two major freeways (I-880 and I-680), State Route 237, and a County expressway. Figure 2.0-1 shows Milpitas's regional location.

The City is served by Valley Transportation Authority (VTA) light rail and a recent BART extension which began passenger service to Milpitas in 2020. Milpitas has experienced a recent surge in residential building activity in recent years, with a considerable increase in residential permit applications, development entitlements, and new construction. In large part, these changes have been brought on by the adoption of two Specific Plans for areas adjacent to an existing VTA station and the City's BART station. The increased development made possible by these Specific Plans has prompted the conversion of areas once dominated by vacant and underutilized land and aging industrial space into high-density transit-oriented development.

ENVIRONMENTAL IMPACT REPORT STUDY AREA

There are several key boundaries addressed by the General Plan, which make up the study area for the General Plan Environmental Impact Report (EIR). These include the city limits, the Sphere of Influence (SOI), Urban Growth Boundary, Urban Service Area Boundary, and the Planning Area, as shown on Figure 2.0-2 and described below.

City Limits: The City Limits include all area within the City's corporate boundary, over which the City exercises land use authority and provides public services.

Sphere of Influence: A Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). A SOI includes both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services.

Urban Growth Boundary: In 1998, voters in the City of Milpitas established an Urban Growth Boundary (UGB) limiting development in its eastern hill areas. The initiative was set to expire in 2018, but was extended another 20 years through the passage of Measure I by Milpitas voters in November 2016.

Urban Service Area Boundary: Contiguous with the UGB the Urban Service Area (USA) restricts the extension of public services and infrastructure to new development in eastern areas of the City Limits and SOI.

Specific Plan Areas: Specific Plan Areas including the Milpitas Metro Specific Plan (formerly the Transit Area Specific Plan –TASP), and the Milpitas Gateway-Main Street Specific Plan (formerly the Midtown Specific Plan - MSP) are designated by the proposed General Plan Land Use Map (Figure 2.0-3). These areas have been designated as Specific Plan Areas and each has an adopted Specific Plan to facilitate comprehensive planning of the large strategic areas utilizing planning techniques to ensure high quality development. The Specific Plans guiding development in these areas aim to integrate development and allow for the coordination of planning efforts between many property owners and allow for infrastructure cost sharing arrangements.

All new development occurring within one of the Specific Plan Areas of the City must adhere to the General Plan and to the development standards and guidelines established by the applicable Specific Plan.

Planning Area: For the purposes of the Milpitas General Plan Update, the Planning Area is defined as the entire area within the SOI, which includes the City limits and the UGB/USA that is included in the analysis and planning for the approximate 20-year horizon of the City's General Plan Update.

2.3 PROJECT OBJECTIVES

The Milpitas General Plan is intended to reflect the desires and vision of Milpitas residents, businesses, the General Plan Advisory Committee, and City Council. The following objectives are identified for the proposed update to the General Plan:

- Protect and enhance Milpitas's community character and sense of community;
- Provide a range of high-quality housing options;
- Attract and retain businesses and industries that provide high-quality and high-paying jobs;
- Expand and improve neighborhood serving shopping areas to provide better local services near neighborhoods and increase sales tax revenues;
- Continue to maintain and improve multimodal transportation opportunities;
- Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
- Address new requirements of State law; and
- Address emerging transportation, housing, and employment trends.

2.4 DESCRIPTION OF PROPOSED GENERAL PLAN PROJECT

The City of Milpitas is preparing a comprehensive update to its existing General Plan, which was last comprehensively updated in 1994. The General Plan Update is expected to be complete in 2020.

The overall purpose of the Milpitas General Plan is to create a policy framework that articulates a vision for the City's long-term physical form and development, while preserving and enhancing the quality of life for residents and increasing opportunities for high-quality local job growth and housing options. The key components of the General Plan will include broad goals for the future of Milpitas, and specific policies and actions that will help implement the stated goals.

GENERAL PLAN ELEMENTS

The Milpitas General Plan includes a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map (Figure 2.0-3). The State requires that the General Plan contain seven mandatory elements: Land Use, Circulation, Housing, Open Space, Noise, Safety, and Conservation, as well as address issues related to climate change and resiliency planning, and environmental justice either as separate elements or as components of the required element framework. The Milpitas General Plan includes all of the State-mandated topics and elements, as well as optional elements and issue areas, including Community Design, Utilities and Community Services, Economic Development, and Community Health and Wellness.

- The **Land Use Element** designates the general distribution and intensity of residential, commercial, industrial, open space, public/semi-public, and other categories of public and private land uses. The Land Use Element includes the Land Use Map, which identifies land use designations for each parcel in the city limits and Planning Area (Figure 2.0-3).

- The **Circulation Element** correlates closely with the Land Use Element and identifies the general locations and extent of existing and proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support a multi-modal transportation system. This element is intended to facilitate mobility of people and goods throughout Milpitas by a variety of transportation modes, including bicycle, pedestrian, and transit.

- The **Community Design Element** identifies high-level community design objectives for the City of Milpitas, including the relationship between the public and private realm, streetscapes, best site planning practices, and placemaking strategies.

- The **Economic Development Element** provides tools and strategies to strengthen and diversify the local economy and ensures the City maintains adequate revenues to provide quality public services. This element seeks to sustain and diversify the City's economy, recognizing the importance of supporting existing and local businesses while broadening and expanding the employment base and economic opportunities within the city.

- The **Conservation and Sustainability Element** addresses conservation topics including: development and use of natural resources, and protections for riparian environments,

native plant and animal species, soils, cultural/historical resources, air quality, and opportunities for energy conservation**.**

- The **Utilities and Community Services Element** establishes policies and programs that address the following public services and facilities: police services; fire protection services; schools; civic, library, medical, and other community facilities; water supplies, sewer services, storm drainage infrastructure, and solid waste disposal. While not specifically required by State law for inclusion in the General Plan, the Utilities and Community Services Element is a critical component in meeting the infrastructure and utility services needs of businesses and residents.

- The **Safety Element** provides the framework to reduce risks associated with a range of environmental and human-caused hazards that may pose a risk to life and property in Milpitas. This element addresses hazards such as fires, geologic hazards, as well as hazardous materials, climate resiliency and adaptation

- The **Noise Element** addresses noise-generating and noise-sensitive uses such as residences and schools. This element also addresses the required topics related to noise, including standards and policies to protect the community from the harmful and annoying effects of exposure to excessive noise levels. This element includes strategies to reduce land use conflicts that may result in exposure to unacceptable noise levels.

- The **Parks, Recreation, and Open Space Element** addresses conservation topics including the development and use of open space and park resources. This element also ensures adequate planning for park and recreation services and facilities. It also details objectives and measures for preserving open space for natural resources and the managed production of resources.

- The **Community Health and Wellness Element** acknowledges the profound effects of the built environment on travel choices, access to food, levels of physical activity, and exposure to risk from accidents or pollution. The Element addresses the topics of active living, healthy lifestyles, environmental justice, and community building.

- The **Housing Element** (adopted in 2015 and covering years 2015-2023) plans for housing to meet the needs of all segments of the community and addresses state requirements. The Housing Element has not been updated as part of the larger General Plan Update process.

GOALS, POLICIES, AND ACTIONS

Each element of the Milpitas General Plan contains a series of goals, policies, and actions. The goals, policies, and actions provide guidance to the City on how to direct change, manage growth, and manage resources over the approximate 20-year life of the General Plan. The following provides a description of each and explains the relationship of each:

- A **goal** is a description of the general desired result that the City seeks to create through the implementation of the General Plan.
- A **policy** is a specific statement that guides decision-making as the City works to achieve its goals. Once adopted, policies represent statements of City regulations. The General Plan's policies set out the standards that will be used by City staff, the Planning Commission, and the City Council in their review of land development projects, resource protection activities, infrastructure improvements, and other City actions. Policies are on-going and don't necessarily require specific action on behalf of the City.
- An **action** is an implementation measure, procedure, technique, or specific program to be undertaken by the City to help achieve a specified goal or implement an adopted policy. The City must take additional steps to implement each action in the General Plan. An action is something that can and will be completed.

GENERAL PLAN LAND USE MAP

The General Plan Land Use Map identifies land use designations for each parcel within the City's Planning Area. The proposed General Plan Land Use Map is shown on Figure 2.0-3.

GENERAL PLAN LAND USE DESIGNATIONS

The Land Use Element of the Milpitas General Plan defines various land use designations by their allowable uses and maximum development densities and intensities. The following describes the proposed land use designations for the General Plan. Table 2.0-1 shows the total acreage for each land use designation shown on the proposed Land Use Map.

RESIDENTIAL LAND USE DESIGNATIONS

Hillside Very Low Density (HVL). The maximum permitted density for this classification is 1 dwelling unit per ten gross acres. The maximum permitted density decreases with increases in slope on a parcel, up to 80 acres per dwelling unit is required for land with an average slope of 50 percent or greater. This designation includes most of the Hillside Area.

Hillside Low Density (HLD). The maximum density for this classification is 1 dwelling unit per gross acre. This density decreases with increases in slope up to ten acres of land are required per dwelling unit for sites with an average slope of 27 percent or greater.

Hillside Medium Density (HMD). The maximum density for this classification is 3 units per gross acre on level land and decreases with increasing slope up to ten acres of land are required per unit for sites with an average slope of approximately 27 percent or greater.

Low Density Residential (LDR). (3 to 5 units per gross acre) All housing units are either on separate lots or as part of a clustered Planned Unit Development. Single-unit detached residences will be the typical housing type in this category.

Medium Density Residential (MDR). (6 to 15 units per gross acre excluding density bonuses). Single-family attached, multi-family, duplexes, or clustered residences would typically be built within this density range.

High Density Residential (HDR). (16 to 30 units per gross acre excluding density bonuses). This density range accommodates a variety of multi-family housing types, ranging from row houses to triplexes and four-plexes, stacked townhouses, walk-up garden apartments, and multi-family apartments and condominiums.

Very High Density Residential (VHDR). (31 to 40 dwelling units per gross acre excluding density bonuses). Development at this density consists generally of multi-story apartments and condominiums, and similar types of residential uses.

Mobile-home Park: (up to 7 dwelling units per gross acre). The Mobile Home Park designation accommodates mobile homes up to 7 units per gross acre. All development operations and applications must be consistent with the mobile home standards included in the Milpitas Municipal Code (XI-10-12.04 - Mobile Home Park (MHP) Overlay District).

MIXED USE DESIGNATIONS

Very High-Density Mixed Use (VHDMU) (up to 75 units per acre and FAR up to 1.5). Projects may include a wholly residential or non-residential concept or a project that integrates residential and non-residential uses vertically or horizontally within a project site. Permitted uses include residential, office, commercial, hotel, and medical uses. Residential-only projects, or projects with a residential component, shall have a minimum average gross density of 41 units per acre and can be built up to 75 units per acre (excluding density bonuses).

Sites developed with a mix of uses, or non-residential uses, must adhere to the FAR maximum of 1.5. An FAR of 2.5 may be permitted on individual sites with approval of a conditional use permit by the Planning Commission. Special criteria would need to be met, including the following: (1) the proposed uses include a hotel or office use that creates substantial new jobs (as determined by the City Council); (2) the design of the project is extremely high quality and the building size and massing is compatible with the scale of the surrounding buildings; and (3) buildings do not shade public parks or plazas more than 30% between 10 AM and 3 PM, as measured on March 20.

Town Center (TWC) (up to 40 units per acre and FAR up to 0.85). This designation provides for a variety of commercial, professional, civic, restaurants, hotels, residential, and entertainment uses. Projects may consist of a wholly non-residential development, or a mixed-use residential project that integrates residential and non-residential uses vertically or horizontally. Residential-only projects are not permitted. Residential developments up to 40 units per acres may be permitted within the Town Center as part of a mixed-use development project to increase economic support to the commercial uses. Developers wanting to maximize the residential component of the parcel are required to provide a minimum FAR of 0.35 for the non-residential component. Sites developed with a mix of uses, or non-residential uses, must adhere to a FAR maximum of up to 0.85.

Neighborhood Commercial Mixed-Use (NCMU) (FAR up to 0.75, and up to 1 unit per 1,500 square feet of nonresidential development). The Neighborhood Commercial Mixed-Use (NCMU) designation is intended to accommodate a mix of commercial and residential uses with an emphasis on commercial activity as the primary use, and residential uses, hotel, and office development allowed on a limited basis. The NCMU designation encourages active neighborhood serving uses at the ground level, including grocery stores, specialty retail, restaurants, plazas, or walk-in personal services such as banks and salons at FARs up to 0.75.

This designation also provides opportunities for vertical or horizontal mixed-use residential development to provide for area vibrancy and to encourage the redevelopment of aging commercial centers by allowing multifamily dwelling units at a rate of 1 unit per 1,500 square feet of new or rehabilitated neighborhood-serving retail and commercial services. The City Council may consider the approval of residential-only projects in the NCMU land use designation, provided the project is 100% affordable to the “low” and “very low” income categories, in order to increase the stock of affordable housing in Milpitas.

Projects with a residential component are subject to additional policy direction (Policy LU 6-1) to ensure that NCMU areas continue to primarily serve surrounding neighborhoods with commercial services.

COMMERCIAL DESIGNATIONS

General Commercial (GNC) (up to 0.5 FAR). This classification provides for a wide range of retail sales, and personal and business services accessed primarily by the automobile at a FAR up to 0.5.

Neighborhood Commercial (NC) (up to 0.75 FAR). The Neighborhood Commercial classification is designed to encourage the location of commercial uses at major intersections in residential areas with FARs up to 0.75. Neighborhood Commercial uses accommodate small- commercial and office uses that are compatible with the surrounding neighborhoods, and are accessible by automobile, bicycle, transit, and by foot.

INDUSTRIAL, MANUFACTURING, AND BUSINESS PARK DESIGNATIONS

Manufacturing (MFG) (up to 1.0 FAR). This classification encompasses a variety of light and heavy industrial activities, such as manufacturing, packaging, processing, warehousing and distribution, and ancillary support uses at a FAR up to 1.0.

Industrial Park (INP) (up to 1.0 FAR). This classification accommodates research, professional, packaging and distribution facilities in a campus park-like setting, free from noise, odor and other such nuisances at a FAR up to 1.0.

Business Park Research & Development (BPRD) (up to 2.5 FAR). The Business Park Research & Development (BPR&D) is intended to accommodate business parks, high-intensity office buildings, light manufacturing parks, and light industrial areas that provide for a variety of businesses that support employment opportunities and services for Milpitas and the region. The BPRD designation would enable the integration of research and development, office, small warehouse and light manufacturing uses in one location, and allows existing firms to grow/expand operations onsite.

Additionally, as manufacturing in the City shifts to more high-tech products and services, the designation will support the consolidation of management, design, and manufacturing uses on a single, integrated site, which can be important for the overall efficiency of business operations, and potentially increase creative collisions and local business-to-business transactions. The BPRD designation allows for a FAR up to 2.5.

Additionally, as part of campus-like development, uses that support businesses including health and fitness centers, restaurants/cafés, limited convenience retail, and day care facilities may be conditionally allowed onsite as a minor use associated with a primary employment-generating use.

SPECIFIC PLAN DESIGNATIONS

Milpitas Gateway-Main Street Specific Plan - MGSP (formerly the Midtown Specific Plan -MSP). The Milpitas Gateway Specific Plan designation provides for the current and future uses of the Gateway area of Milpitas, in accordance with the Specific Plan. The Specific Plan sets forth the types,

locations and intensities of land uses to be accommodated within the Gateway Area. Its purpose is to create an economically-viable Main Street type development that serves as a cultural hub of the city. A variety of uses are allowed in this designation, including entertainment, retail, commercial, residential, civic, cultural, office, and high-density mixed use residential in a compact, walkable, and unique centralized setting. All new development occurring within the MGSP designation is required to adhere to the development standards and guidelines established in the Specific Plan.

Milpitas Metro Specific Plan – MMSP (formerly the Transit Area Specific Plan - TASP). The Milpitas Metro Specific Plan (MMSP) designation creates a structure for a walkable, transit-oriented area with a mix of land uses, which encourages walking, biking, and transit trips and minimizes vehicle trips and reduce vehicle miles traveled (VMT). Development allowed within the Specific Plan area accommodates substantial growth, while minimizing impacts on local roadways, and reduces urban sprawl at the periphery of the region. All new development occurring within the MMSP designation adheres to the development standards and guidelines established in the Specific Plan.

California Circle Specific Plan Overlay. This future specific plan area is located along California Circle, east of the I-880 corridor, and west of the Penitencia Creek corridor, as shown on the Land Use Map (Figure LU-1). The policy guidance and framework for this area is included in Action LU-2b.

PUBLIC, SEMI-PUBLIC, AND CONSERVATION

Public Facilities (PF). This classification is for parcels owned by public agencies and intended to be accessed by the public. There are three general institutional classifications: Public Facilities, Schools and Other Public Facility.

Permanent Open Space (POS). The POS designation identifies areas designated for parks, waterways, sensitive habitat, groundwater recharge areas, creek corridors, and trails. Development in these areas shall be limited to such buildings and structures that support the uses described above. Examples of acceptable buildings and structures may include park facilities, restrooms, trails, signage and utilities infrastructure.

Table 2.0-1 summarizes land use designations under the Proposed General Plan Land Use Map.

Table 2.0-1: Proposed General Plan Land Use Designation Acreages

Land Use	Acres - City Limits	Acres - SOI	Total
Residential Uses			
HVL - Hillside Very Low Density	607.63	3,690.18	4,297.81
HLD - Hillside Low Density	391.04		391.04
HMD- Hillside Medium Density	239.00		239.00
LDR - Low Density Residential	1,491.12	0.85	1,491.96
MDR - Medium Density Residential	305.14		305.14
HDR - High Density Residential	229.74		229.74
VHDR- Very High Density Residential	21.79		21.79
MHP - Mobile Home Park	53.11		53.11
Mixed Uses			
NCMU - Neighborhood Commercial Mixed Use	140.34		140.34
TWC - Town Center	133.58		133.58
VHDMU - Very High Density Mixed Use	3.00		3.00
Commercial Uses			
GNC - General Commercial	155.35		155.35
NC - Neighborhood Commercial	27.28		27.28
Manufacturing and Industrial Business Park Uses			
INP- Industrial Park	224.82		224.82
MFG - Manufacturing	505.74		505.74
BPRD - Business Park/Research & Development	630.88		630.88
Specific Plan			
MGSP - Milpitas Gateway-Main St. Specific Plan	496.64		496.64
MMSP - Milpitas Metro Specific Plan	366.20		366.20
Limited Development Public/Quasi Public and ROW Uses			
PF - Public Facilities	229.60		229.60
POS - Permanent Open Space	963.38	1,322.07	2,285.45
ROW	56.30	4.54	60.83
WW - Waterway	37.82		37.82
Grand Total	**7,309.50**	**5,017.64**	**12,327.14**

SOURCE: DE NOVO PLANNING GROUP, 2019

2.5 GENERAL PLAN BUILDOUT ANALYSIS

Table 2.0-2 includes a comparison overview of existing conditions, the current General Plan Land Use Map, and the proposed General Plan Land Use Map in terms of population, housing units, nonresidential development square footage, jobs, and the jobs-to-housing ratio.

Growth projections shown in Table 2.0-2 represent an estimate of new growth potential under the existing General Plan and the proposed General Plan, which and are based on several factors, including the availability of vacant and underutilized parcels and historical growth trends in Milpitas and the region. Given that actual development rates and growth rates in Milpitas are likely to be significantly lower than the maximum allowed development under the General Plan (if every parcel in the City developed or redeveloped to its fully potential) over a 20-year planning horizon, these projections are intended to provide a meaningful estimate of the level of growth that could potentially occur. New development and growth are largely dictated by existing development conditions, market conditions, and land turnover rates. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

While no specific development projects are proposed as part of the Milpitas Plan Update, the General Plan will accommodate future growth in Milpitas, including new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes a 20-year horizon, and 2040 is assumed to be the buildout year of the General Plan.

As shown in Table 2.0-2, buildout of the General Plan could yield a total of up to 33,401 housing units, a population of 113,530 people, 47,807,536 square feet of non-residential building square footage, and 84,333 jobs within the Planning Area. As shown in Table 2.0-2, this represents development growth over existing conditions of up to 11,186 new housing units, 37,473 people, 19,729,648 square feet of new non-residential building square footage and 36,795 jobs.

TABLE 2.0-2: COMPARATIVE GROWTH PROJECTIONS, EXISTING GENERAL PLAN LAND USE MAP AND PROPOSED LAND USE MAP

	Population	Dwelling Units	Nonresidential Square Footage	Jobs	Jobs per Housing Unit
Existing Conditions					
	76,057	22,215	28,007,888	47,538	2.14
New Growth Potential					
Existing General Plan	31,722	9,469	6,452,761	10,181	1.08
Proposed General Plan	37,473	11,186	19,729,648	36,795	3.29
Total Growth: Existing Plus New Growth Potential					
Existing General Plan	107,779	31,684	34,460,649	57,719	1.82
Proposed General Plan	113,530	33,401	47,737,536	84,333	2.52

SOURCES: SANTA CLARA COUNTY ASSESSOR 2017; CALIFORNIA DEPARTMENT OF FINANCE 2017; U.S CENSUS ONTHEMAP; ESRI 2017, DE NOVO PLANNING GROUP 2019.

Tables 2.0-3 and 2.0-4 provide detailed growth projections under the Proposed General Plan (broken down by land use) in terms new growth plus existing development (Table 2.0-3), and additional new growth (Table 2.0-4). Table 2.0-3 breaks down the total (existing plus new development) buildout projection by General Plan Land Use Designation, including acres assigned to each land use and associated housing units, population growth, and non-residential building square footage estimates at buildout. Table 2.0-4 quantifies new development potential (over existing conditions, or net new development) within the Planning Area for the Proposed General Plan.

TABLE 2.0-3: PLANNING AREA BUILDOUT (EXISTING ASSESSED CONDITIONS PLUS NEW DEVELOPMENT ALLOWED UNDER THE PROPOSED LAND USE MAP)

LAND USE DESIGNATION	TOTAL ACRES	HOUSING UNITS AT BUILDOUT*	POPULATION GROWTH AT BUILDOUT**	NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT*
Residential Land Uses				
HVL - Hillside Very Low Density	4,297.81	229	767.15	72,858.00
HLD - Hillside Low Density	391.04	180	603	80,557.00
HMD- Hillside Medium Density	239.00	183	613.05	27,150.00
LDR - Low Density Residential	1,491.96	9,778	32756.3	17,272.00
MDR - Medium Density Residential	305.14	3,187	10676.45	301,019.00
HDR - High Density Residential	229.74	4,171	14206.85	--
VHDR- Very High Density Residential	21.79	723	2656.05	--
MHP - Mobile Home Park	53.11	180	603	--
Subtotal	**7,029.59**	**18,631**	**62,882**	**498,856**
Mixed-Use Land Uses				
NCMU - Neighborhood Commercial Mixed Use	140.34	1,578	5520.3	3,207,387.98
TWC - Town Center	133.58	1,064	3798.4	1,681,833.63
VHDMU - Very High Density Mixed Use	3.00	269	1135.15	--
Subtotal	**276.92**	**2,911**	**10,454**	**4,889,222**
Commercial Uses				
GNC - General Commercial	155.35	--	--	4,518,763.25
NC - Neighborhood Commercial	27.28	--	--	338,544.29
Subtotal	**182.63**	**--**	**--**	**4,857,308**
Manufacturing and Industrial Business Park Uses				
INP- Industrial Park	224.82	--	--	5,689,027.67
MFG - Manufacturing	505.74	--	--	9,216,459.99
BPRD - Business Park/Research & Development	630.88	--	--	14,590,810.75
Subtotal	**1,361.44**	**--**	**--**	**29,496,298**

LAND USE DESIGNATION	TOTAL ACRES	HOUSING UNITS AT BUILDOUT*	POPULATION GROWTH AT BUILDOUT**	NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT*
Specific Plan				
MSP - Midtown Specific Plan	496.64	3,838	13,091	3,440,982.02
TASP - Transit Area Specific Plan	366.20	8,020	27,103	4,554,870.47
Subtotal	**862.84**	**11,859**	**40,195**	**7,995,852**
Limited Development Public/Quasi Public and ROW Uses				
PF - Public Facilities	229.60	1	3	--
POS - Permanent Open Space	2,285.45	--	--	--
ROW	60.83	--	--	--
WW - Waterway	37.82	1	3	--
Subtotal	**2,613.70**	**2**	**6**	**--**
Totals	**12,327**	**33,401**	**113,530**	**47,737,536**

SOURCE: DE NOVO PLANNING GROUP, 2019 * EXISTING UNITS AND NON-RESIDENTIAL SQ. FT FOR LAND USES THAT CHANGED USE OR WERE CONSOLIDATED ARE CARRIED FORWARD WITHIN THE UPDATED LAND USE FOR FUTURE BUILDOUT ESTIMATE PURPOSES. ** POPULATION ASSUMED A HH SIZE OF 3.35 ACROSS ALL UNIT TYPES AND MOST NEW UNITS ARE MF AND MIXED-USE UNITS WHICH MAY REDUCE HH SIZE OVER TIME.

TABLE 2.0-4: POTENTIAL NEW GROWTH WITHIN THE PLANNING AREA, OVER EXISTING CONDITIONS

LAND USE DESIGNATION	TOTAL ACRES	NEW HOUSING UNITS AT BUILDOUT	NEW POPULATION GROWTH AT BUILDOUT	NEW NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT	NEW JOBS AT BUILDOUT
Residential Land Uses					
HVL - Hillside Very Low Density	4,297.81	193	646	--	--
HLD - Hillside Low Density	391.04	127	425	--	--
HMD- Hillside Medium Density	239.00	78	262	--	--
LDR - Low Density Residential	1,491.96	186	621	--	--
MDR - Medium Density Residential	305.14	63	210	--	--
HDR - High Density Residential	229.74	364	1,218	--	--
VHDR- Very High Density Residential	21.79	64	214	--	--
MHP - Mobile Home Park	53.11	--	--	--	--
Subtotal	**7,029.59**	**1,075**	**3,596**	**--**	**--**
Mixed-Use Land Uses					
NCMU - Neighborhood Commercial Mixed Use	140.34	1,578	5,285	3,207,388	5,832
TWC - Town Center	133.58	535	1,791	434,872	791
VHDMU - Very High Density Mixed Use	3.00	269	901	--	--
Subtotal	**276.92**	**2,382**	**7,977**	**3,642,260**	**6,623**
Commercial Uses					
GNC - General Commercial	155.35	--	--	(139,676)	(233)
NC - Neighborhood Commercial	27.28	--	--	338,544	564
Subtotal	**182.63**	**--**	**--**	**198,868**	**331**
Manufacturing and Industrial Business Park Uses					
INP- Industrial Park	224.82	--	--	(3,305,911)	(4,723)
MFG - Manufacturing	505.74	--	--	1,953,074	1,953
BPRD - Business Park/Research & Development	630.88	--	--	14,590,811	27,792

LAND USE DESIGNATION	TOTAL ACRES	NEW HOUSING UNITS AT BUILDOUT	NEW POPULATION GROWTH AT BUILDOUT	NEW NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT	NEW JOBS AT BUILDOUT
Subtotal	**1,361.44**	**--**	**--**	**13,237,974**	**25,022**
Specific Plan					
MSP - Midtown Specific Plan	496.64	1,435	4,807	1,434,598	2,608
TASP - Transit Area Specific Plan	366.20	6,296	21,092	1,215,948	2,211
Subtotal	**862.84**	**7,731**	**25,899**	**2,650,546**	**4,819**
Limited Development Public/Quasi Public and ROW Uses					
PF - Public Facilities	229.60	--	--	--	--
POS - Permanent Open Space	2,285.45	--	--	--	--
ROW	60.83	--	--	--	--
WW - Waterway	37.82	--	--	--	--
Subtotal	**2,613.70**	**--**	**--**	**--**	**--**
Totals	**12,327**	**11,186**	**37,473**	**19,729,648**	**36,795**

SOURCE: DE NOVO PLANNING GROUP, 2019

2.6 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the proposed Project.

CITY OF MILPITAS

The City of Milpitas is the lead agency for the proposed Project. The updated Milpitas General Plan will be presented to the Planning Commission for review and recommendation and to the City Council for comment, review, and consideration for adoption. The City Council has the sole discretionary authority to approve and adopt the Milpitas General Plan. In order to approve the proposed project, the City Council would consider the following actions:

- Certification of the General Plan EIR;
- Adoption of required CEQA findings for the above action;
- Adoption of a Mitigation Monitoring and Reporting Program; and
- Approval of the General Plan Update.

SUBSEQUENT USE OF THE EIR

This EIR provides a review of environmental effects associated with implementation of the proposed General Plan. When considering approval of subsequent activities under the proposed General Plan, the City of Milpitas would utilize this EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Projects or activities successive to this EIR may include, but are not limited to, the following:

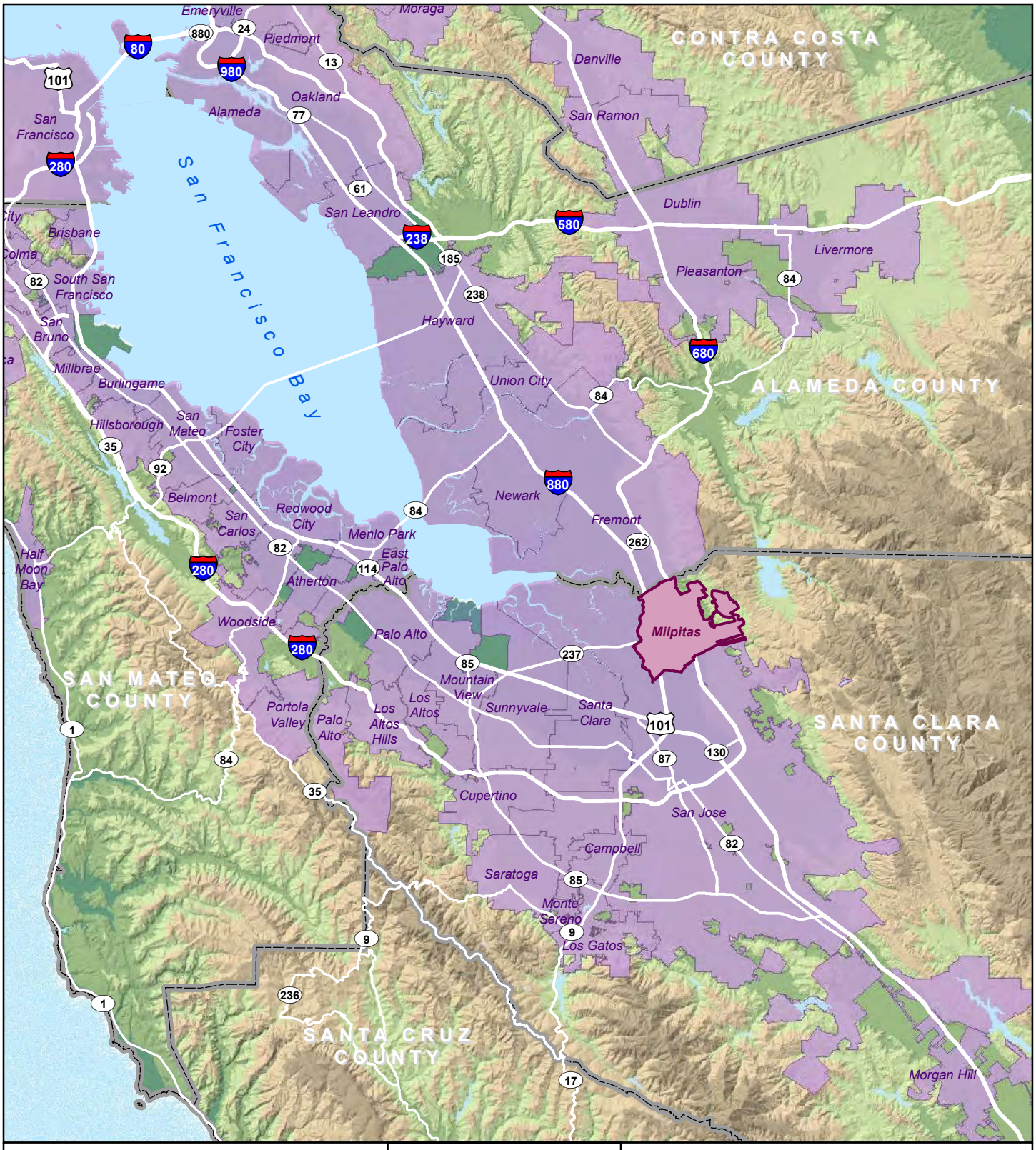
- Approval and funding of major projects and capital improvements;
- Future Specific Plan, Planned Unit Development, or Master Plan approvals;
- Revision to the Milpitas Zoning Ordinance;
- Development plan approvals, such as tentative subdivision maps, variances, conditional use permits, and other land use permits;
- Development Agreements;
- Property rezoning consistent with the General Plan;
- Permit issuances and other approvals necessary for public and private development projects;
- Issuance of permits and other approvals necessary for implementation of the General Plan;
- Sphere of Influence (SOI) updates prepared by LAFCO; and

- Annexations processed by LAFCO.

OTHER GOVERNMENTAL AGENCY APPROVALS

City approval of the proposed project would not require any actions or approvals by other public agencies. Subsequent projects and other actions to support implementation of the proposed project would require actions, including permits and approvals, by other public agencies that may include, but are not necessarily limited to:

- California Department of Transportation (Caltrans) approval of projects and encroachment permits for projects affecting State highway facilities.
- Regional Water Quality Control Board (RWQCB) approval for National Pollution Discharge Elimination System compliance, including permits and Storm Water Pollution Prevention Plan approval and monitoring.
- Santa Clara County Local Agency Formation Commission (LAFCO) approvals for annexation of any lands into the boundaries of the City of Milpitas.
- California Department of Fish and Wildlife (CDFW) approval of potential future streambed alteration agreements, pursuant to Fish and Game Code. Approval of any future potential take of State-listed wildlife and plant species covered under the California Endangered Species Act.
- U.S. Fish and Wildlife Service (USFWS) approvals involving any future potential take of Federally listed wildlife and plant species and their habitats, pursuant to the Federal Endangered Species Act.



Legend

- County Boundary
- Incorporated Area
- City of Milpitas

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Sources: CalAtlas; Santa Clara County; Santa Cruz County; Alameda County; Contra Costa County. Map date: March 9, 2020. Revised August 26,

CITY OF MILPITAS GENERAL PLAN UPDATE

Figure 2.0-1. Regional Vicinity Map

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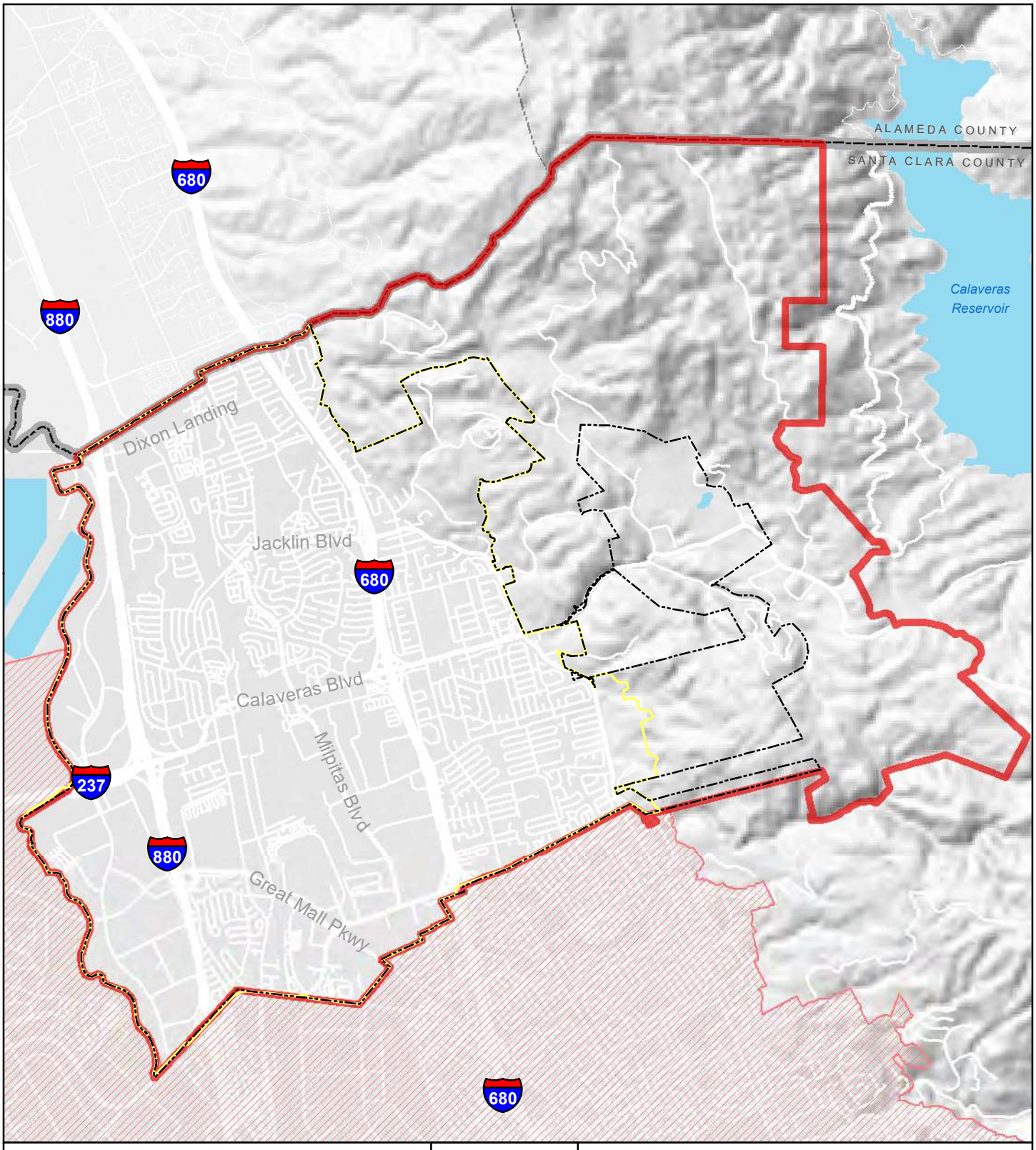

Legend

- Milpitas City Boundary
- Milpitas Sphere of Influence
- Milpitas Urban Service Area
- San Jose Planning Limits of Urban Growth
- County Boundary

Sources: Santa Clara County; Alameda County. Map date: August 25, 2020.

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CITY OF MILPITAS GENERAL PLAN UPDATE

Figure 2.0-2. Planning Boundaries Map

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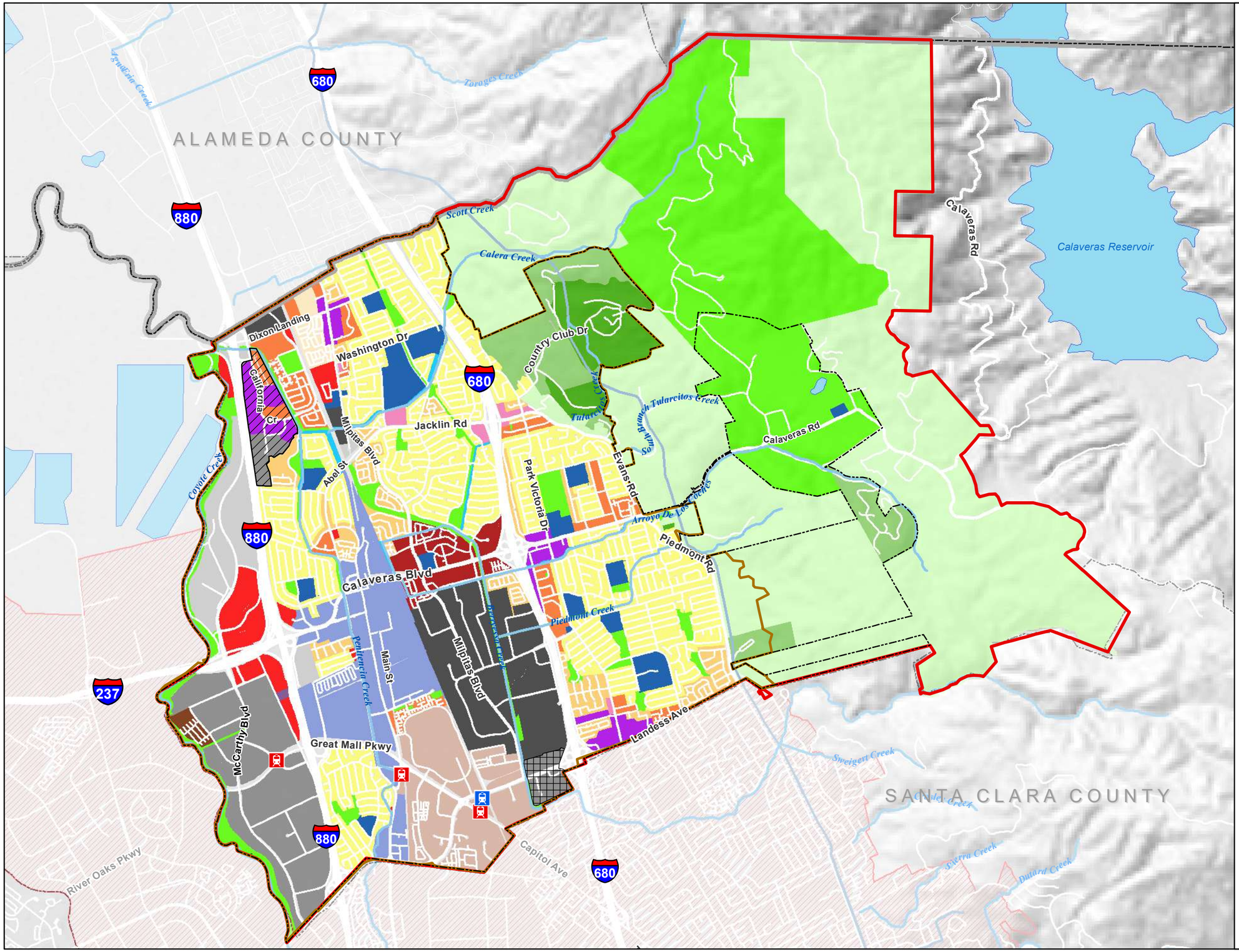
CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 2.0-3.
Proposed Land Use Map



Legend

- HVL - Hillside Very Low Density
- HLD - Hillside Low Density
- HMD - Hillside Medium Density
- LDR - Low Density Residential
- MDR - Medium Density Residential
- HDR - High Density Residential
- VHDR - Very High Density Residential
- MHP - Mobile Home Park
- VHDMU - Very High Density Mixed Use
- NCMU - Neighborhood Commercial Mixed Use
- GNC - General Commercial
- NC - Neighborhood Commercial
- TWC - Town Center
- INP - Industrial Park
- BPRD - Business Park/Research & Development
- MFG - Manufacturing
- PF - Public Facilities
- POS - Permanent Open Space
- MMSP - Milpitas Metro Specific Plan
- MGSP -Milpitas Gateway Specific Plan
- WW - Waterway
- Future Specific Plan Overlay
- Innovation District Overlay

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- Milpitas Urban Service Area
- San Jose Planning Limits of Urban Growth
- County Boundary

Transit Stations

- BART Station
- VTA Station

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De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Sources: City of Milpitas; Santa Clara County; USGS; CalAtlas. Map date: August 26, 2020.

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The city of Milpitas and the surrounding areas possess numerous scenic resources, many of which are found in the natural areas within the unincorporated areas of Santa Clara County. These resources enhance the quality of life for Milpitas residents, and provide for outdoor recreational, agricultural, and tourist-generating uses. Landscapes can be defined as a combination of four visual elements: landforms, water, vegetation, and man-made structures. Scenic resource quality is an assessment of the uniqueness or desirability of a visual element. This section reviews and summarizes Milpitas' key scenic resources.

This section was prepared based on existing reports and literature for Milpitas. Additional sources of information included the California Department of Transportation's (Caltrans) Designated Scenic Route map for Santa Clara County.

This section provides a background discussion of the scenic highways and corridors, and natural scenic resources such as creeks, wildlife areas, and prominent visual features found in the Milpitas Planning Area. This section is organized with an existing setting, regulatory setting, and impact analysis.

There were no comments received during the NOP comment period related to this environmental topic.

CONCEPTS AND TERMINOLOGY

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area. Scenic quality can best be described as the overall impression that an individual viewer retains after driving through, walking through, or flying over an area. Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, number of views seen, distance of the viewers, and viewing duration. Viewer sensitivity relates to the extent of the public's concern for a particular viewshed. These terms and criteria are described in detail below.

Visual Character. Natural and artificial landscape features contribute to the visual character of an area or view. Visual character is influenced by geologic, hydrologic, botanical, wildlife, recreational, and urban features. Urban features include those associated with landscape settlements and development, including roads, utilities, structures, earthworks, and the results of other human activities. The perception of visual character can vary significantly seasonally, even hourly, as weather, light, shadow, and elements that compose the viewshed change. The basic components used to describe visual character for most visual assessments are the elements of form, line, color, and texture of the landscape features. The appearance of the landscape is described in terms of the dominance of each of these components.

Visual Quality. Visual quality is evaluated using the well-established approach to visual analysis adopted by the Federal Highway Administration, employing the concepts of vividness, intactness, and unity, which are described below.

- Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- Intactness is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements; this factor can be present in well-kept urban and rural landscapes, and in natural settings.
- Unity is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the landscape.

Visual quality is evaluated based on the relative degree of vividness, intactness, and unity, as modified by visual sensitivity. High-quality views are highly vivid, relatively intact, and exhibit a high degree of visual unity. Low-quality views lack vividness, are not visually intact, and possess a low degree of visual unity.

Viewer Exposure and Sensitivity. The measure of the quality of a view must be tempered by the overall sensitivity of the viewer. Viewer sensitivity or concern is based on the visibility of resources in the landscape, proximity of viewers to the visual resource, elevation of viewers relative to the visual resource, frequency and duration of views, number of viewers, and type and expectations of individuals and viewer groups.

The importance of a view is related, in part, to the position of the viewer to the resource; therefore, visibility and visual dominance of landscape elements depend on their placement within the viewshed. A viewshed is defined as all of the surface area visible from a particular location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail). To identify the importance of views of a resource, a viewshed must be broken into distance zones of foreground, middle ground, and background. Generally, the closer a resource is to the viewer, the more dominant it is and the greater its importance to the viewer. Although distance zones in a viewshed may vary between different geographic region or types of terrain, the standard foreground zone is 0.25–0.5 mile from the viewer, the middle ground zone is from the foreground zone to 3–5 miles from the viewer, and the background zone is from the middle ground to infinity.

Visual sensitivity depends on the number and type of viewers and the frequency and duration of views. Visual sensitivity is also modified by viewer activity, awareness, and visual expectations in relation to the number of viewers and viewing duration. For example, visual sensitivity is generally higher for views seen by people who are driving for pleasure, people engaging in recreational activities such as hiking, biking, or camping, and homeowners. Sensitivity tends to be lower for views seen by people driving to and from work or as part of their work. Commuters and non-recreational travelers have generally fleeting views and tend to focus on commute traffic, not on surrounding scenery; therefore, they are generally considered to have low visual sensitivity. Residential viewers typically have extended viewing periods and are concerned about changes in the views from their homes; therefore, they are generally considered to have high visual sensitivity. Viewers using recreation trails and areas, scenic highways, and scenic overlooks are usually assessed as having high visual sensitivity.

Judgments of visual quality and viewer response must be made based on a regional frame of reference. The same landform or visual resource appearing in different geographic areas could have a different degree of visual quality and sensitivity in each setting. For example, a small hill may be a significant visual element on a flat landscape but have very little significance in mountainous terrain.

Scenic Highway Corridor. The area outside of a highway right-of-way that is generally visible to persons traveling on the highway.

Scenic Highway/Scenic Route. A highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and human-made scenic resources and access or direct views to areas or scenes of exceptional beauty (including those of historic or cultural interest). The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising. Until the mid-1980's, general plans in California were required to include a Scenic Highways Element.

View Corridor. A view corridor is a highway, road, trail, or other linear feature that offers travelers a vista of scenic areas within a city or county.

3.1.1 ENVIRONMENTAL SETTING

BUILT & NATURAL ENVIRONMENT

Milpitas is located at the southern end of the San Francisco Bay, between Fremont and San Jose. The City has developed on the flat plain between the Mission Hills to the east and baylands to the west. The Mission Hills and Monument Peak (elevation 2,594 feet) form a distinctive scenic backdrop to the City and are important to community identity and character. Additionally, a significant visual feature outside the Milpitas Planning Area is Mount Diablo. Rising to an elevation of 3,849 feet above mean sea level, Mt. Diablo is a prominent landmark dominating the skyline.

Milpitas' image is of a suburban/urban community located at the foot of a significant section of the Mount Diablo Range. The foothills, sparsely settled, represent a semi-wilderness of rugged terrain, remote plateaus, and distant views.

The foothills and the tree-lined Coyote Creek corridor provide Milpitas with a scenic backdrop and visual reference points. Scenic Resources could be both natural and man-made including hillsides, ridges, visually significant vegetation, and other elements that are critical in shaping the City's scenic identity

Also important to Milpitas' identity are the major entryways of the City. Southbound I-880 at the Dixon Landing Road interchange is a major gateway to Milpitas from the north. This gateway area is visually indistinguishable from Fremont to the north or from other communities along I-880. Approaching Milpitas on I-880 from the north, drivers pass under Dixon Landing Road at the interchange then quickly over the Penitencia Creek channel into Milpitas.

Nighttime light levels in the majority of the Planning Area are typical of medium density suburban areas, although the partially undeveloped lands and baylands west of I-880 are generally darker at night than developed areas to the east.

Milpitas has two Specific Plan areas for which it has more detailed planning: the Milpitas Metro Specific Plan – MMSP (formerly the Transit Area Specific Plan - TASP) and the Milpitas Gateway-Main Street Specific Plan - MGSP (formerly the Midtown Specific Plan -MSP).

The Milpitas Metro Specific Plan designation creates a structure for a walkable, transit-oriented area with a mix of land uses, which encourages walking, biking, and transit trips and minimizes vehicle trips and reduce vehicle miles traveled (VMT). Development allowed within the Specific Plan area accommodates substantial growth, while minimizing impacts on local roadways, and reduces urban sprawl at the periphery of the region. All new development occurring within the Milpitas Metro Specific Plan designation adheres to the development standards and guidelines established in the Specific Plan. The Plan area includes a mix of high density residential uses, commercial and office uses, and the newly-opened BART station.

The Milpitas Gateway-Main Street Specific Plan designation provides for the current and future uses of the Gateway area of Milpitas, in accordance with the Specific Plan. The Specific Plan sets forth the types, locations, and intensities of land uses to be accommodated within the Gateway-Main Street Area. Its purpose is to create an economically-viable Main Street type development that serves as a cultural hub of the City. A variety of uses are allowed and currently exist within this area, including entertainment, retail, commercial, residential, civic, cultural, office, and high-density mixed use residential in a compact, walkable, and unique centralized setting. All new development occurring within the MGSP designation is required to adhere to the development standards and guidelines established in the Specific Plan.

SCENIC HIGHWAYS AND CORRIDORS

According to the California Scenic Highway Mapping System, administered by Caltrans, there are no officially designated State Scenic Highways in the vicinity of the City of Milpitas. There is one officially designated scenic highway corridor in Santa Clara County: State Route 9 from the Santa Cruz County line to the Los Gatos city limits. This officially designated scenic highway corridor does not provide views of Milpitas or the immediate surrounding areas.

There are three Eligible State Scenic Highway Corridors within Santa Clara County that have not yet been officially designated. However, none of the Eligible State Scenic Highway Corridors provide views of Milpitas or the immediate surrounding areas.

The City of Milpitas' existing General Plan establishes two types of scenic routes: Scenic Corridors and Scenic Connectors. Scenic Corridors are located along designated streets that pass through an area of scenic value. Scenic Corridors include the street rights-of-way and extend 200 feet from the center line of the streets along which they are located. Areas within the corridors are subject to special development controls for the purpose of retaining and enhancing nearby views or maintaining unobstructed distant views. Public projects will also be reviewed for compliance with this plan. Scenic Connectors are designated streets connecting or providing access to Scenic Corridors or distant views. A Scenic Connector may not necessarily traverse an area of scenic value, and the abutting land is not subject to the Scenic Corridor land use controls. However, special design treatment — which may include roadside landscaping, undergrounding of utility lines, and street furnishings — will be carried out to provide a visual continuity with the Scenic Corridors.

LIGHT AND GLARE

During the day, sunlight reflecting from structures is a primary source of glare, while nighttime light and glare can be divided into both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, and street lights. The principal mobile source of nighttime light and glare is vehicle headlamp illumination. This ambient light environment can be accentuated during periods of low clouds or fog.

The variety of urban land uses in the Planning Area are the main source of daytime and nighttime light and glare. They are typified by single and multi-family residences, commercial structures, industrial areas, and street lights. These areas and their associated human activities (inclusive of vehicular traffic) characterize the existing light and glare environment present during daytime and nighttime hours in the urbanized portions of the Planning Area. Areas of open space and along creek corridors are characterized primarily by non-urban uses and open space uses and lower intensity residential development, and generally have lower levels of ambient nighttime lighting and daytime glare.

Sources of glare in urbanized portions of the Planning Area come from light reflecting off surfaces, including glass, and certain siding and paving materials, as well as metal siding/roofing. The urbanized areas of Milpitas contain sidewalks and paved parking areas which reflect street and vehicle lights. The existing light environment found in the project area is generally considered typical of developed areas.

Sky glow is the effect created by light reflecting into the night sky. Sky glow is of particular concern in areas surrounding observatories, where darker night sky conditions are necessary, but is also of concern in more rural or natural areas where a darker night sky is either the norm or is important to wildlife. Due to the urban nature of the city limits, a number of existing light sources affect residential areas and illuminate the night sky. Isolating impacts of particular sources of light or glare is therefore not appropriate or feasible for the Project.

3.1.2 REGULATORY SETTING

FEDERAL

There are no Federal regulations that apply to the proposed project related to visual resources in the study area.

STATE

California Department of Transportation – California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change, which would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code Section 260 et seq.

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. A list of California's scenic highways and map showing their locations may be obtained from the Caltrans Scenic Highway Coordinators.

If a route is not included on a list of highways eligible for scenic highway designation in the Streets and Highways Code Section 263 et seq., it must be added before it can be considered for official designation. A highway may be designated scenic depending on the extent of the natural landscape that 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.

When a local jurisdiction nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. A scenic corridor is the land generally adjacent to and visible from the highway. A scenic highway designation protects the scenic values of an area. Jurisdictional boundaries of the nominating agency are also considered, and the agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program.

To receive official designation, the local jurisdiction must follow the same process required for official designation of State Scenic Highways. The minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development;
- Detailed land and site planning;
- Control of outdoor advertising (including a ban on billboards);
- Careful attention to and control of earthmoving and landscaping; and
- Careful attention to design and appearance of structures and equipment.

LOCAL

City of Milpitas Streetscape Master Plan

The City of Milpitas Streetscape Master Plan contains guidelines and recommendations for the varied streetscape conditions that exist or can be foreseen in the future and is based on the understanding that attractive streetscapes are a benefit to the community – economically, environmentally, visually and psychologically.

City of Milpitas Municipal Code Chapter 2: Tree Maintenance and Protection

Chapter 2 of the Municipal Code contains standards to utilize applicable techniques, methods, and procedures required to preserve, when feasible, all trees and plantings on City property, and all protected plantings of significant size, age, and/or benefit to the community at large.

Measure I

Measure I, passed in November 2016, is the reincarnation of Measure Z, which was approved by voters in 1998, establishing a 20-year urban growth boundary. The measure limits development in Milpitas to the valley floor and the base of the foothills by prohibiting Milpitas from providing City services to new land use developments in the hillside area, through Dec. 31, 2038.

Measure J

Measure J, passed in November 2016, necessitates voter approval to change the City's existing Hillside Ordinance and Milpitas General Plan land use designations for hillside properties. The measure also requires amendments to the zoning of properties covered by the ordinance to go before voters before becoming effective, through Dec. 31, 2038.

Measure K

Measure K, passed in November 2016, prevents areas in the City designated as parks and open space from being developed as residential, commercial, or industrial unless first approved by a two-thirds vote of residents

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on aesthetics if it will:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In 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 publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: General Plan implementation would not have a substantial adverse effect on a scenic vista (Less than Significant)

While the Milpitas Planning Area contains numerous areas and viewsheds with relatively high scenic value, there are no officially designated scenic vista points in the Planning Area. Additionally, as described above, there are no officially designated scenic highways located in the vicinity of Milpitas. Significant visual resources in the Planning Area include Mission Hills and Monument Peak, which form a distinctive scenic backdrop to the city. Additionally, a significant visual feature outside the Milpitas Planning Area is Mount Diablo, a prominent landmark dominating the skyline.

There are very few areas within the City of Milpitas that are designated for urban land uses which are not already developed. Existing areas within the City that are undeveloped and in a naturalized condition are designated for open space uses by both the existing and proposed General Plan Land Use Maps, or are further restricted from development by the City's Hillside Ordnance.[1] The proposed Land Use Map does not convert any open space lands to urban uses.

However, as noted in greater detail in the Project Description chapter (Chapter 2.0), implementation of the proposed General Plan could lead to new and expanded urban and suburban development throughout the City. This new development may result in changes to the skyline throughout the Planning Area, which may obstruct or interfere with views of visual features surrounding the Planning Area. Furthermore, buildout under the proposed General Plan and implementation of the General Plan Land Use Map has the potential to result in new and expanded development along

[1] Measure J, passed in November 2016, necessitates voter approval to change the City's existing Hillside Ordinance and Milpitas General Plan land use designations for hillside properties. The measure also requires amendments to the zoning of properties covered by the ordinance to go before voters before becoming effective, through Dec. 31, 2038.

highway corridors with high scenic values, even though these corridors are not officially designated as State Scenic Highways.

The Milpitas General Plan has been developed to preserve expansive areas of open space within the hillsides located to the east and to ensure that new development is located in and around existing urbanized areas, thus ensuring that new development is primarily an extension of the existing urban landscape and minimizes interruption of views of nearby visual features. Future development would be required to be consistent with the proposed General Plan.

The implementation of the policies and actions contained in the General Plan listed below would ensure that new urban residential and non-residential development in the Milpitas Planning Area is located in and around existing urbanized areas and developed to be visually compatible with nearby open space resources. Additionally, the implementation of the policies and actions contained in the Community Design Element would further ensure that new development is designed in a way that enhances the visual quality of the community, compliments the visual character of the city, and that adverse effects on public views are minimized. Through implementation of the policies and actions included in the General Plan, and listed below, implementation of the proposed General Plan would result in a **less than significant impact**.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY DESIGN ELEMENT POLICIES

Policy CD 3-1: Strengthen the positive qualities of the City's neighborhoods, districts, and centers.

Policy CD 3-2: Support the development and preservation of unique neighborhoods, districts, and centers that exhibit a special sense of place and quality of design.

Policy CD 3-3: Ensure that new development and redevelopment reinforces desirable elements of its neighborhood, district, or center, including architectural style, scale, and setback patterns.

Policy CD 3-4: Strengthen the identity of individual neighborhoods, districts, and centers through the use of entry monuments, flags, street signs, themed streets, natural features, landscaping, and lighting.

Policy CD 3-5: Ensure that new residential development and substantial additions are designed to maintain and support the existing character and development pattern of the surrounding neighborhood, especially in historic neighborhoods and neighborhoods with consistent design characteristics.

Policy CD 3-6: Encourage the rehabilitation of older residential neighborhoods, districts, and centers to prevent blight and maintain the city's character.

Policy CD 3-7: Create, regulate, and enforce attractive front yards in residential neighborhoods that are open to the street.

Policy CD 3-8: Ensure that new residential developments in and adjacent to the city's districts are designed to blend with existing building forms. Considerations for residential developments in and around Downtown should include the following:

A. *Ensure that development projects with more than 2 units consist of detached units with one and two-story building elements, when located in a predominantly single-family residential neighborhood.*

B. *Ensure residential unit entries face the public street.*

C. *Ensure that new development is designed to blend in with the existing building patterns of the neighborhood. For example, if the majority of the garages on the street are at the rear of the site, the new building should be designed to accommodate a rear garage.*

D. *Ensure that properties designated for non-residential uses, such as offices or properties surrounding the Civic Center, retain the residential character and scale of development characteristic of the surrounding residential neighborhood. The development is to provide sufficient, safe pedestrian and bicycle access into and throughout the site, on-site parking, human-scaled lighting and landscape screening to minimize the commercial appearance of the use.*

Policy CD 3-9: For commercial, multi-family, mixed-use, and employment-generating projects, encourage site designs and development patterns that connect adjoining sites and function as a single center.

ACTIONS

Action CD-2a: Continue to review projects utilizing Milpitas Municipal Code Title XI, Chapter 10, Section 64 (Development Review Process) standards and procedures.

Action CD-2b: Periodically review and update the Design Guidelines and Plan Review Checklists to maintain consistency with the General Plan, the City's Municipal Code, state law, and current best practice design solutions.

Action CD-2c: Continue to adopt, apply, and update objective design standards for high density residential development as needed. The standards should be objective and address architecture, size and scale of structures, compatibility with other residential development, building materials and colors, landscaping, streetscapes, site planning, and similar development subjects.

Action CD-2d: Continue to adopt, apply, and update design standards and guidelines for commercial and mixed-use development as needed. The standards and guidelines should address architecture, size and scale of structures, the vertical and horizontal mixing of uses, building materials and colors, landscaping, streetscapes, site planning, and similar development subjects.

Action CD-2e: Adopt and apply design guidelines for industrial development. The guidelines should address architecture, size and scale of structures, building materials and colors, landscaping, entry enhancements, service areas, overall safety features for pedestrians, bicyclists and employees, site planning, and similar development subjects.

Impact 3.1-2: General Plan implementation would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (Less than Significant)

As discussed in the settings section, no adopted State scenic highway is located in Milpitas. There is one officially designated scenic highway corridor in Santa Clara County: State Route 9 from the Santa Cruz County line to the Los Gatos city limits. This officially designated scenic highway corridor does not provide views of Milpitas or the immediate surrounding areas, and there are no sections of highway in the Milpitas vicinity eligible for Scenic Highway designation.

There are three Eligible State Scenic Highway Corridors within Santa Clara County that have not yet been officially designated. None of the Eligible State Scenic Highway Corridors provide views of Milpitas or the immediate surrounding areas. Given that no adopted State scenic highways are located within the Planning Area, and that no scenic highways provide views of the Planning Area, State scenic highway impacts associated with General Plan implementation would be **less than significant**.

Impact 3.1-3: Project implementation would not conflict with an applicable zoning or other regulation governing scenic quality within an urbanized area. (Less than Significant)

CEQA Guidelines Section 15387 defines an "urbanized area" as a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. In addition, to be considered a urbanized area according to CEQA, projects must also be within the boundary of a map prepared by the U.S. Bureau of the Census which designates the area as urbanized area. According to the U.S. Bureau of the Census, the planning area is mapped and designated as urbanized area. In addition, the planning area is located in the greater urban area of Santa Clara County which has an estimated population of approximately 1.9 million people; meaning the planning area is within an urbanized area and subjected to applicable zoning or other regulation governing scenic quality.

Zoning and other regulations governing scenic quality applicable to the City of Milpitas include the Design Guidelines and Plan Review Checklist and the City of Milpitas Master Streetscape Master Plan, and Measures I, J, and K. Policies in the proposed General Plan are intended to complement and further the intent of these provisions regulating scenic quality and resources, and any development occurring under the proposed General Plan would be subject to compliance with these guidelines, as well as the applicable regulations set forth in the Milpitas Municipal Code. The proposed General Plan would therefore not substantially degrade the existing visual character or quality of public views of the Sphere of Influence and its surroundings. Scenic quality-related impacts associated with General Plan implementation would thus be **less than significant**. In order to further ensure that future development allowed under the General Plan would not degrade the existing visual character of the environment, the City has included the following policies and actions in the General Plan.

GENERAL PLAN MINIMIZATION MEASURES

See General Plan policies and actions identified in Impact 3.1-1.

Impact 3.1-4: General Plan implementation could result in the creation of new sources of nighttime lighting and daytime glare (Less than Significant)

The primary sources of daytime glare are generally sunlight reflecting from structures and other reflective surfaces and windows. Implementation of the proposed General Plan would introduce new sources of daytime glare into previously developed areas of the Planning Area and increase the amount of daytime glare in existing urbanized areas. The General Plan Land Use Map identifies areas for the future development of residential, commercial, industrial, recreational, and public uses. Such uses may utilize materials that produce glare. Daytime glare impacts would be most severe in the limited areas of the City that have not been previously disturbed, including the limited number of vacant parcels designated for urbanized land uses, and in areas that receive a high level of daily viewership.

The primary sources of nighttime lighting are generally from exterior building lights, street lights, and vehicle headlights. Exterior lighting around commercial and industrial areas may be present throughout the night to facilitate extended employee work hours, ensure worker safety, and to provide security lighting around structures and facilities. Nighttime lighting impacts would be most severe in areas that do not currently experience high levels of nighttime lighting. Increased nighttime lighting can reduce visibility of the night sky, resulting in fewer stars being visible and generally detracting from the quality of life in Milpitas. Future development would be required to be consistent with the General Plan, as well as lighting and design requirements in the Milpitas Municipal Code. The proposed General Plan contains policy CD1-1 which would ensure that new developments are designed to context sensitive to adjacent properties. Policy CD 3-1 would ensure that new development projects utilize appropriate building materials, such as window glazing, that do not result in significant increases in unusual glare.

Through the implementation of these policies in conjunction with the City's municipal code during the development review process, the City can ensure that adverse impacts associated with daytime glare and nighttime lighting are **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

COMMUNITY DESIGN ELEMENT POLICIES

Policy CD 1-1: Require development projects to:

A. *Preserve positive characteristics and unique features of the site; and*
B. *Incorporate a context-sensitive design approach that considers the scale and existing and desired character of adjacent uses and the surrounding neighborhood or district.*

Policy CD 3-1: Size and configure mixed-use development to accommodate viable commercial spaces with appropriate floor-to-floor heights, tenant space configurations, window glazing, and other infrastructure for restaurants and retail uses to ensure appropriate flexibility for

accommodating a variety of commercial tenants over time. Retail commercial buildings should have primary entrances at the street at sidewalk grade, particularly in pedestrian-oriented areas.

LAND USE ELEMENT POLICIES

LU 5-7: In considering land use change requests, consider factors such as compatibility with the residential surroundings, privacy, noise, and changes in traffic levels on residential streets.

LAND USE ELEMENT ACTIONS

Action LU-5a: Through the development review and permit process, screen development proposals for land use and transportation network compatibility, including compatibility with existing surrounding or abutting development or neighborhoods.

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This section provides a background discussion of agricultural lands, agricultural resources, and forest/timber resources. This section is organized with an environmental setting, regulatory setting, and impact analysis.

No comments on this environmental topic were received during the NOP comment period.

3.2.1 ENVIRONMENTAL SETTING

AGRICULTURAL RESOURCES

There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Milpitas General Plan Land Use Map.

There are no agricultural lands identified by the California Department of Conservation's Farmland Mapping and Monitoring Program within the Milpitas Planning Area.

Important Farmlands

The California Department of Conservation (DOC), as part of its Farmland Mapping and Monitoring Program (FMMP), prepares Important Farmland Maps indicating the potential value of land for agricultural production. The Santa Clara County Important Farmland Map identifies five agriculture-related categories and three non-agricultural categories:

Prime Farmland: Prime farmland is land with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance: Farmland of statewide importance is farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. The land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Unique Farmland: Unique farmland is farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

Farmland of Local Importance: Farmland of local importance is considered land important to the local agricultural economy but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

Grazing Land: Grazing land is land on which the existing vegetation is suitable for the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for this category is 40 acres.

Urban and Built-up Land: This category consists of non-agricultural land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Other Land: Other land is non-agricultural land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Water Area: This category consists of bodies of water.

IMPORTANT FARMLANDS IN PLANNING AREA

There are no agricultural lands identified by the California Department of Conservation's Farmland Mapping and Monitoring Program within the Milpitas Planning Area that are considered prime farmland, unique farmland, or farmland of statewide Importance. All lands within the Milpitas city limits are identified as Urban and Built-up Land by the California Department of Conservation. Within Santa Clara County and within the Milpitas SOI portions of the hillside areas are identified as grazing lands, and small areas of farmland of local importance are designated by Santa Clara County.

Farmland Preservation

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 to encourage the preservation of the State's agricultural lands and to prevent their premature conversion to urban uses. The Williamson Act is described in greater detail under the Regulatory Setting section of this chapter.

There are no lands within the Milpitas Planning Area that are currently under a Williamson Act contract.

FOREST RESOURCES

Forest land is defined by Public Resources Code Section 12220(g). Forest land includes *"land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."*

Timber land is defined by Public Resources Code Section 4526, and means *"land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."*

There are no forest lands or timber lands located within the Milpitas Planning Area.

3.2.2 REGULATORY SETTING

FEDERAL

Farmland Protection Policy Act

The Natural Resources Conservation Service (NRCS), an agency within the U.S. Department of Agriculture, is responsible for implementation of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to minimize Federal programs' contribution to the conversion of farmland to non-agricultural uses by ensuring that Federal programs are administered in a manner that is compatible with State, local, and private programs designed to protect farmland. The NRCS provides technical assistance to Federal agencies, State and local governments, tribes, and nonprofit organizations that desire to develop farmland protection programs and policies. The NRCS summarizes FPPA implementation in an annual report to Congress.

Farm and Ranch Lands Protection Program

The NRCS administers the Farm and Ranch Lands Protection Program (FRPP), a voluntary program aimed at keeping productive farmland in agricultural uses. Under the FRPP, the NRCS provides matching funds to State, local, or tribal government entities and nonprofit organizations with existing farmland protection programs to purchase conservation easements. According to the 1996 Farm Bill which establishes the program, the goal of the Farm and Ranch Lands Protection Program is to protect between 170,000 and 340,000 acres of farmland per year. Participating landowners agree not to convert the land to non-agricultural use and retain all rights to use the property for agriculture. A conservation plan must be developed for all lands enrolled based upon the standards contained in the NRCS Field Office Technical Guide. A minimum of 30 years is required for conservation easements and priority is given to applications with perpetual easements. The NRCS provides up to 50 percent of the fair market value of the easement being conserved. To qualify for a conservation easement, farm or ranch land must meet several criteria. The land must be:

- Prime, Unique, or other productive soil, as defined by NRCS based on factors such as water moisture regimes, available water capacity, developed irrigation water supply, soil temperature range, acid-alkali balance, water table, soil sodium content, potential for flooding, erodibility, permeability rate, rock fragment content, and soil rooting depth;
- Included in a pending offer to be managed by a nonprofit organization, State, tribal, or local farmland protection program;
- Privately owned;
- Placed under a conservation plan;
- Large enough to sustain agricultural production;
- Accessible to markets for the crop that the land produces; and
- Surrounded by parcels of land that can support long-term agricultural production.

STATE

California Department of Conservation

The California Department of Conservation (DOC) administers and supports a number of programs, including the Williamson Act, the California Farmland Conservancy Program (CFCP), the Williamson Act Easement Exchange Program (WAEEP), and the Farmland Mapping and Monitoring Program (FMMP). These programs are designed to preserve agricultural land and provide data on conversion of agricultural land to urban use. The DOC has authority for the approval of agreements entered into under the WAEEP. Key DOC tools available for land conservation planning are conservation grants, tax incentives to keep land in agriculture or open space, and farmland mapping and monitoring.

Williamson Act

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 to encourage the preservation of the State's agricultural lands and to prevent their premature conversion to urban uses. In order to preserve these uses, the Act established an agricultural preserve contract procedure by which any county or city taxes landowners at a lower rate, using a scale based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. In return, the owners guarantee that these properties remain under agricultural production for a 10-year period. The contract is self-renewing; however, the landowner may notify the county or city at any time of the intent to withdraw the land from its preserve status. There are two means by which the landowner may withdraw the land from its contract preserve status. First, the landowner may seek to cancel the contract. This takes the land out of the contract quickly with a minimal waiting period, but the landowner pays a statutory penalty to the State. Second, the landowner may notice a non-renewal or seek a partial non-renewal of the contract. Land withdrawal through the non-renewal process involves a 9- or 10-year period (depending on the timing of the notice) of tax adjustment to full market value before protected open space can be converted to urban uses.

Williamson Act subvention payments to local governments have been suspended since the fiscal year 2009-10 due to the State’s fiscal constraints. The Williamson Act contracts between landowners and local governments remain in force, regardless of the availability of subvention payments.

Farmland Security Zones

A Farmland Security Zone is an area created within an agricultural preserve by a board of supervisors (board) or city council (council) upon request by a landowner or group of landowners. An agricultural preserve defines the boundary of an area within which a city or county will enter into contracts with landowners. The boundary is designated by resolution of the board or council having jurisdiction. Agricultural preserves must generally be at least 100 acres in size. Farmland Security Zone contracts offer landowners greater property tax reduction. Land restricted by a Farmland Security Zone contract is valued for property assessment purposes at 65% of its Williamson Act valuation or 65% of its Proposition 13 valuation, whichever is lower.

Forest Practices Rules

The California Department of Forestry and Fire Protection (CalFire) implements the laws that regulate timber harvesting on privately-owned lands. These laws are contained in the Z'berg-Nejedly Forest Practice Act of 1973 which established a set of rules known as the Forest Practice Rules (FPRs) to be applied to forest management related activities (i.e., timber harvests, timberland conversions, fire hazard removal, etc.). They are intended to ensure that timber harvesting is conducted in a manner that will preserve and protect fish, wildlife, forests, and streams. Under the Forest Practice Act, a Timber Harvesting Plan (THP) is submitted to CalFire by the landowner outlining what timber is proposed to be harvested, harvesting method, and the steps that will be taken to prevent damage to the environment. If the landowner intends to convert timberland to non-timberland uses, such as a winery or vineyard, a Timberland Conversion Permit (TCP) is required in addition to the THP. It is CalFire's intent that a THP will not be approved which fails to adopt feasible mitigation measures or alternatives from the range of measures set out or provided for in the Forest Practice Rules, which would substantially lessen or avoid significant adverse environmental impacts resulting from timber harvest activities. THPs are required to be prepared by Registered Professional Foresters (RPFs) who are licensed to prepare these plans. For projects involving TCPs, CalFire acts as lead agency under CEQA, and the county or city acts as a responsible agency.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on agricultural and forest resources if it will:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526);
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: General Plan implementation would not result in the conversion of farmlands, including Prime Farmland and Unique Farmland, to non-agricultural use (less than significant)

There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Milpitas Land Use Map. There are no agricultural lands identified by the California Department of Conservation's Farmland Mapping and Monitoring Program within the Milpitas city limits. Lands located within Santa Clara County and within the Milpitas SOI are identified by the Department of Conservation as grazing lands, and areas identified by the County as farmlands of local importance. As shown and described in the Chapter 2.0 (Project Description) all lands within the hillside areas and within the SOI have maintained their current land use and have not been re-designated for urban development. Therefore, General Plan implementation would result in a **less than significant** impact relative to this topic and no mitigation is required.

Impact 3.2-2: General Plan implementation would not result in conflicts with existing zoning for agricultural use, or a Williamson Act contract (Less than Significant Impact)

There are no lands within the Milpitas Planning Area that are currently under a Williamson Act contract. As such, General Plan implementation would result in no impact to Williamson Act contracts.

There are several parcels of land throughout the Planning Area that are zoned for agricultural use; however none are in active agricultural production. The City has one zoning district for agricultural uses: Agriculture District (A). The A District is established to preserve lands best suited for agricultural use from the encroachment of incompatible uses, and to preserve in agricultural use land suited to eventual development in other uses, pending proper timing for the economical provision of utilities, major streets, and other facilities so that compact, orderly development will occur. Change of zoning district from A to any other zoning district shall only be made in general accord with the General Plan.

As shown on the proposed General Plan Land Use Map (Figure 2.0-3), all of the land within the Planning Area is planned for urban development in one form or another, with the exception of areas designated for Open Space or Public Facility uses. It is assumed that the land within the City zoned A will eventually be developed with urban land uses, consistent with the proposed Land Use Map.

While the Zoning Code and Zoning Map currently identify parcels in Milpitas within the A zoning district, the City's Zoning Code makes clear that parcels with this designation are not intended to be used exclusively for agricultural uses in perpetuity. As described in the Subsection XI-10-40.01 of the Milpitas Municipal Code , A zoned lands are *"suited to eventual development in other uses, pending proper timing for the economical provision of utilities, major streets, and other facilities so that compact, orderly development will occur."* And that *"{c]hange of zoning district from A to any other zoning district shall only be made in general accord with the General Plan"*

Given the purpose, intent, and flexibility of the established A zoning district, the proposed Land Use Map would not conflict with existing agricultural zoning in the City of Milpitas.

Actions LU-1a and LU-1b call for the City to update the Zoning Map and Zoning Code to bring them into consistency with the General Plan Land Use Map and standards, following completion of the General Plan Update. Implementation of these action items would ensure consistency between the General Plan and the Zoning Code and therefore this impact would be considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT ACTIONS

Action LU-1a: Update the City's Zoning Map as appropriate to ensure consistency with the land use designations shown on Figure LU-1.

Action LU-1b: Review the Zoning Ordinance and update as appropriate to reflect Land Use goals, policies, and implementation actions included in this Plan.

Impact 3.2-3: Result in the loss of forest land or conversion of forest land to non-forest use (No Impact)

There are no forest lands or timber lands located within the Milpitas Planning Area. Therefore, General Plan implementation would result in **no impact** relative to this topic and no mitigation is required.

Impact 3.2-4: General Plan implementation would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use (Less than Significant Impact)

As described previously, there are no lands within the Planning Area that are designated by the existing or proposed General Plan for agricultural uses, and there are no Important Farmlands identified by the Department of Conservation located within the Milpitas city limits. Lands located within Santa Clara County and within the Milpitas SOI are identified by the Department of Conservation as grazing lands, and areas identified by the County as farmlands of local importance. No lands within the hillside areas and within the SOI have not been re designated by this general plan update for urban development. There are several parcels that are zoned for agricultural use as described previously; however, none are currently in active agricultural uses, and, as stated in the Milpitas Municipal Code, are assumed to be developed under the general plan designations. Therefore, General Plan implementation would result in a **less than significant impact** relative to this topic.

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This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from project implementation. There were no comments received during the public review period for the NOP related to air quality. The Greenhouse Gases, Climate Change, and Energy analysis is in Section 3.7 of this document.

3.3.1 ENVIRONMENTAL SETTING

SAN FRANCISCO BAY AREA AIR BASIN

The Planning Area is located within the San Francisco Bay Area Air Basin (SFBAAB), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the southwestern portion of Solano County. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

Climate, Topography, and Air Pollution Potential

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern portion of the Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential.

HIGH PRESSURE CELL

During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high-pressure cell centered over the northeastern portion of the Pacific Ocean. This high-pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow on shore out of the north/northwest.

The steady northwesterly flow induces upwelling of cold water from below. This upwelling produces a band of cold water off the California coast. When air approaches the California coast, already cool and moisture-laden from its long journey over the Pacific, it is further cooled as it crosses this bank

of cold water. This cooling often produces condensation resulting in a high incidence of fog and stratus clouds along the Northern California coast in the summer.

Generally, in the winter, the Pacific high-pressure cell weakens and shifts southward, winds tend to flow offshore, upwelling ceases, and storms occur. During the winter rainy periods, inversions (layers of warmer air over colder air; see below) are weak or nonexistent, winds are usually moderate, and air pollution potential is low. The Pacific high-pressure cell does periodically become dominant, bringing strong inversions, light winds, and high pollution potential.

TOPOGRAPHY

The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the SFBAAB. The greatest distortion occurs when low-level inversions are present and the air beneath the inversion flows independently of air above the inversion, a condition that is common in the summer time.

The only major break in California's Coast Range occurs in the SFBAAB. Here the Coast Range splits into western and eastern ranges. Between the two ranges lies San Francisco Bay. The gap in the western coast range is known as the Golden Gate, and the gap in the eastern coast range is the Carquinez Strait. These gaps allow air to pass into and out of the SFBAAB and the Central Valley.

WIND PATTERNS

During the summer, winds flowing from the northwest are drawn inland through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more directly from the west as they stream through the Golden Gate. This channeling of wind through the Golden Gate produces a jet that sweeps eastward and splits off to the northwest toward Richmond and to the southwest toward San Jose when it meets the East Bay hills.

Wind speeds may be strong locally in areas where air is channeled through a narrow opening, such as the Carquinez Strait, the Golden Gate, or the San Bruno gap. For example, the average wind speed at San Francisco International Airport in July is about 17 knots (from 3 p.m. to 4 p.m.), compared with only 7 knots at San Jose and less than 6 knots at the Farallon Islands.

The air flowing in from the coast to the Central Valley, called the sea breeze, begins developing at or near ground level along the coast in late morning or early afternoon. As the day progresses, the sea breeze layer deepens and increases in velocity while spreading inland. The depth of the sea breeze depends in large part upon the height and strength of the inversion. If the inversion is low and strong, and hence stable, the flow of the sea breeze will be inhibited and stagnant conditions are likely to result.

In the winter, the SFBAAB frequently experiences stormy conditions with moderate to strong winds, as well as periods of stagnation with very light winds. Winter stagnation episodes are characterized by nighttime drainage flows in coastal valleys. Drainage is a reversal of the usual daytime air-flow

patterns; air moves from the Central Valley toward the coast and back down toward the Bay from the smaller valleys within the SFBAAB.

TEMPERATURE

Summertime temperatures in the SFBAAB are determined in large part by the effect of differential heating between land and water surfaces. Because land tends to heat up and cool off more quickly than water, a large-scale gradient (differential) in temperature is often created between the coast and the Central Valley, and small-scale local gradients are often produced along the shorelines of the ocean and bays. The temperature gradient near the ocean is also exaggerated, especially in summer, because of the upwelling of cold ocean bottom water along the coast. On summer afternoons the temperatures at the coast can be 35ºF cooler than temperatures 15 to 20 miles inland. At night this contrast usually decreases to less than 10º.

In the winter, the relationship of minimum and maximum temperatures is reversed. During the daytime the temperature contrast between the coast and inland areas is small, whereas at night the variation in temperature is large.

PRECIPITATION

The SFBAAB is characterized by moderately wet winters and dry summers. Winter rains account for about 75 percent of the average annual rainfall. The amount of annual precipitation can vary greatly from one part of the SFBAAB to another even within short distances. In general, total annual rainfall can reach 40 inches in the mountains, but it is often less than 16 inches in sheltered valleys.

During rainy periods, ventilation (rapid horizontal movement of air and injection of cleaner air) and vertical mixing are usually high, and thus pollution levels tend to be low. However, frequent dry periods do occur during the winter where mixing and ventilation are low and pollutant levels build up.

AIR POLLUTION POTENTIAL

The potential for high pollutant concentrations developing at a given location depends upon the quantity of pollutants emitted into the atmosphere in the surrounding area or upwind, and the ability of the atmosphere to disperse the contaminated air. The topographic and climatological factors discussed above influence the atmospheric pollution potential of an area. Atmospheric pollution potential, as the term is used here, is independent of the location of emission sources and is instead a function of factors described below.

Wind Circulation

Low wind speed contributes to the buildup of air pollution because it allows more pollutants to be emitted into the air mass per unit of time. Light winds occur most frequently during periods of low sun (fall and winter, and early morning) and at night. These are also periods when air pollutant emissions from some sources are at their peak, namely, commute traffic (early morning) and wood burning appliances (nighttime). The problem can be compounded in valleys, when weak flows carry

the pollutants upvalley during the day, and cold air drainage flows move the air mass downvalley at night. Such restricted movement of trapped air provides little opportunity for ventilation and leads to buildup of pollutants to potentially unhealthful levels.

Inversions

An inversion is a layer of warmer air over a layer of cooler air. Inversions affect air quality conditions significantly because they influence the mixing depth (i.e., the vertical depth in the atmosphere available for diluting air contaminants near the ground). The highest air pollutant concentrations in the SFBAAB generally occur during inversions.

There are two types of inversions that occur regularly in the SFBAAB. One is more common in the summer and fall, while the other is most common during the winter. The frequent occurrence of elevated temperature inversions in summer and fall months acts to cap the mixing depth, limiting the depth of air available for dilution. Elevated inversions are caused by subsiding air from the subtropical high-pressure zone, and from the cool marine air layer that is drawn into the SFBAAB by the heated low-pressure region in the Central Valley.

The inversions typical of winter, called radiation inversions, are formed as heat quickly radiates from the earth's surface after sunset, causing the air in contact with it to rapidly cool. Radiation inversions are strongest on clear, low-wind, cold winter nights, allowing the build-up of such pollutants as carbon monoxide and particulate matter. When wind speeds are low, there is little mechanical turbulence to mix the air, resulting in a layer of warm air over a layer of cooler air next to the ground. Mixing depths under these conditions can be as shallow as 50 to 100 meters, particularly in rural areas. Urban areas usually have deeper minimum mixing layers because of heat island effects and increased surface roughness. During radiation inversions, downwind transport is slow, the mixing depths are shallow, and turbulence is minimal, all factors which contribute to ozone formation.

Although each type of inversion is most common during a specific season, either inversion mechanism can occur at any time of the year. Sometimes both occur simultaneously. Moreover, the characteristics of an inversion often change throughout the course of a day. The terrain of the SFBAAB also induces significant variations among subregions.

Solar Radiation

The frequency of hot, sunny days during the summer months in the SFBAAB is another important factor that affects air pollution potential. It is at the higher temperatures that ozone is formed. In the presence of ultraviolet sunlight and warm temperatures, reactive organic gases and oxides of nitrogen react to form secondary photochemical pollutants, including ozone. Because temperatures in many of the SFBAAB inland valleys are so much higher than near the coast, the inland areas are especially prone to photochemical air pollution.

In late fall and winter, solar angles are low, resulting in insufficient ultraviolet light and warming of the atmosphere to drive the photochemical reactions. Ozone concentrations do not reach significant levels in the SFBAAB during these seasons.

Sheltered Terrain

The hills and mountains in the SFBAAB contribute to the high pollution potential of some areas. During the day, or at night during windy conditions, areas in the lee sides of mountains are sheltered from the prevailing winds, thereby reducing turbulence and downwind transport. At night, when wind speeds are low, the upper atmospheric layers are often decoupled from the surface layers during radiation conditions. If elevated terrain is present, it will tend to block pollutant transport in that direction. Elevated terrain also can create a recirculation pattern by inducing upvalley air flows during the day and reverse downvalley flows during the night, allowing little inflow of fresh air.

The areas having the highest air pollution potential tend to be those that experience the highest temperatures in the summer and the lowest temperatures in the winter. The coastal areas are exposed to the prevailing marine air, creating cooler temperatures in the summer, warmer temperatures in winter, and stratus clouds all year. The inland valleys are sheltered from the marine air and experience hotter summers and colder winters. Thus, the topography of the inland valleys creates conditions conducive to higher air pollution potential.

Pollution Potential Related to Emissions

Although air pollution potential is strongly influenced by climate and topography, the air pollution that occurs in a location also depends upon the amount of air pollutant emissions in the surrounding area or transported from more distant places. Air pollutant emissions generally are highest in areas that have high population densities, high motor vehicle use, and/or industrialization. These contaminants created by photochemical processes in the atmosphere, such as ozone, may result in high concentrations many miles downwind from the sources of their precursor chemicals.

CRITERIA POLLUTANTS

All criteria pollutants can have human health and environmental effects at certain concentrations. The United States Environmental Protection Agency (USEPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). In addition, California establishes ambient air quality standards, called California Ambient Air Quality Standards (CAAQS). California law does not require that the CAAQS be met be a specified date as is the case with NAAQS.

The ambient air quality standards for the six criteria pollutants (as shown in Table 3.3-1) are set to public health and the environment within an adequate margin of safety (as provided under Section 109 of the Federal Clean Air Act). Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants, and form the scientific basis for new and revised ambient air quality standards. Principal characteristics and possible health and environmental effects from exposure to the six primary criteria pollutants generated by the Project are discussed below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While ozone in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the

sun, high concentrations of ozone at ground level are a major health and environmental concern. Ozone is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC)[1] and oxides of nitrogen (NOx) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak ozone levels occur typically during the warmer times of the year. Both VOCs and NOx are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents.

The reactivity of ozone causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of ozone not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to ozone for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (U.S. Environmental Protection Agency 2019a). The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion (U.S. Environmental Protection Agency 2019b). The average background level of ozone in the California and Nevada is approximately 48.3 parts per billion, which represents approximately 77 percent of the total ozone in the western region of the U.S. (NASA, 2015).

In addition to human health effect, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. Ozone can also act as a corrosive and oxidant, resulting in property damage such as the degradation of rubber products and other materials. Ozone concentrations tend to be highest in summer and lowest in winter.

Over long-term timeframes, ozone concentrations in California have decreased (California Air Resources Board, 2019b). On a more local level, data from the California Resources Board shows an approximately 11 percent reduction in ozone levels in the SCAB region from 1992 to 2011 (California Air Resources Board, 2014). The California Air Resources Board (CARB) also forecasts that emissions of VOCs and NOx in the SCAB will continue to reduce over time (CARB, 2013).

[1] The CARB uses the term "Reactive Organic Gases" (ROG) in place of "Volatile Organic Compounds" (VOC).

Carbon monoxide (CO) is a colorless, odorless, and poisonous gas produced by incomplete burning of carbon in fuels. Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects (California Air Resources Board, 2019c). Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects to ambient CO (California Air Resources Board, 2019d).

Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina (USEPA, 2016). Such acute effects may occur under current ambient conditions for some sensitive individuals, while increases in ambient CO levels increases the risk of such incidences.

CO concentrations tend to be highest in fall and winter and lowest in spring and summer. Over the long-term, CO concentrations have decreased throughout the United States. Average concentrations of CO have reduced from approximately 333 parts per billion in 2000 to approximately 132 parts per billion in 2017, in California and Nevada (i.e. the West region, as defined by the USEPA) (USEPA, 2018).

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban atmospheres. The main effect of increased NO_2 is the increased likelihood of respiratory problems. Under ambient conditions, NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone and acid rain, and may affect both terrestrial and aquatic ecosystems. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2.

The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NOx). NOx plays a major role, together with VOCs, in the atmospheric reactions that produce ozone. NOx forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

NO_2 concentrations tend to be highest in winter and lowest in summer. Over the long-term, nitrogen dioxide concentrations have generally been decreasing throughout the United States (USEPA, 2018).

Average concentrations of NO_2 have reduced from approximately 69 parts per billion in 2000 to approximately 48 parts per billion in 2017, in California and Nevada (i.e. the West region, as defined by the USEPA) (USEPA, 2018). Data from the CARB shows a reduction in NO_2 emissions in the SFBAAB from 1992 to 2011 (California Air Resources Board, 2014).

Sulfur dioxide (SO_2) is one of the multiple gaseous oxidized sulfur species and is formed during the combustion of fuels containing sulfur, primarily coal and oil. The largest anthropogenic source of SO_2 emissions in the U.S. is fossil fuel combustion at electric utilities and other industrial facilities. SO_2 is also emitted from certain manufacturing processes and mobile sources, including locomotives, large ships, and construction equipment.

SO_2 affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Short-term exposure to ambient SO_2 has been associated with various adverse health effects. Multiple human clinical studies, epidemiological studies, and toxicological studies support a causal relationship between short-term exposure to ambient SO_2 and respiratory morbidity. The observed health effects include decreased lung function, respiratory symptoms, and increased emergency department visits and hospitalizations for all respiratory causes. These studies further suggest that people with asthma are potentially susceptible or vulnerable to these health effects. In addition, SO_2 reacts with other air pollutants to form sulfate particles, which are constituents of fine particulate matter ($PM_{2.5}$). Inhalation exposure to $PM_{2.5}$ has been associated with various cardiovascular and respiratory health effects (USEPA, 2017). Increased ambient SO_2 levels would lead to increased risk of such effects.

SO_2 emissions that lead to high concentrations of SO_2 in the air generally also lead to the formation of other sulfur oxides (SO_x). SO_x can react with other compounds in the atmosphere to form small particles. These particles contribute to particulate matter (PM) pollution. Small particles may penetrate deeply into the lungs and in sufficient quantity can contribute to health problems.

Over the long-term, sulfur dioxide concentrations have decreased throughout the United States (USEPA, 2018). Average concentrations of SO_2 have reduced from approximately 17.6 parts per billion in 2000 to approximately 6.2 parts per billion in 2017 at monitoring sites in California and Nevada (i.e. the West region, as defined by the USEPA) (USEPA, 2018).

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and VOCs are also considered particulate matter. PM is generally

categorized based on the diameter of the particulate matter: PM_{10} is particulate matter 10 micrometers or less in diameter (known as respirable particulate matte*r*), and $PM_{2.5}$ is particulate matter 2.5 micrometers or less in diameter (known as fine particulate matter).

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. Small particulate pollution has even health impacts even at very low concentrations – indeed no threshold has been identified below which no damage to health is observed.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural uses (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of small particles, which are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the USEPA created new Federal air quality standards for $PM_{2.5}$.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also soils and damages materials, and is a major cause of visibility impairment.

Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lunch function, and increased respiratory symptoms. Studies show that every 1 microgram per cubic meter reduction in $PM_{2.5}$ results in a one percent reduction in mortality rate for individuals over 30 years old (Bay Area Air Quality Management District, 2017). Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis – and even premature death. Additionally, depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. Environmental Protection Agency, 2019c).

PM concentrations tend to be highest in winter and spring and lowest in summer. The CARB identifies that total emissions of diesel PM in the SFBAAB region have decreased from 9 tons/day in 2000 to 2 tons per day in 2015.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Once taken into the body, lead distributes throughout the body in the blood and is accumulated in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

Lead is persistent in the environment and can be added to soils and sediments through deposition from sources of lead air pollution. Other sources of lead to ecosystems include direct discharge of waste streams to water bodies and mining. Elevated lead in the environment can result in decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates.

Lead exposure is typically associated with industrial sources; major sources of lead in the air are ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters. As a result of the USEPA's regulatory efforts, including the removal of lead from motor vehicle gasoline, levels of lead in the air decreased by 98 percent between 1980 and 2014 (USEPA, 2019d). Based on this reduction of lead in the air over this period, and since most new developments to not generate an increase in lead exposure, the health impacts of ambient lead levels are not typically monitored by the CARB.

AMBIENT AIR QUALITY STANDARDS

Both the U.S. EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and California state ambient air quality standards are summarized in Table 3.3-1 for important pollutants. The federal and state ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}.

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The 1-hour ozone standard was phased out and replaced by an 8-hour standard of 0.075 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001. In April 2005, the Air Resources Board approved a new eight-

hour standard of 0.070 ppm and retained the one-hour ozone standard of 0.09 after an extensive review of the scientific literature. The U.S. EPA signed a final rule for the Federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015.

TABLE 3.3-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

NOTES: PPM = PARTS PER MILLION, µG/M^3 = MICROGRAMS PER CUBIC METER
SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2020.

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The current PM_{10} standards were to be retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns within the Planning Area is related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Santa Clara County has a state designation of Nonattainment for Ozone, PM_{10}, and $PM_{2.5}$ and is either Unclassified or Attainment for all other criteria pollutants. The County has a national designation of Nonattainment for ozone and $PM_{2.5}$. The County is designated either attainment or unclassified for the remaining national standards. Table 3.3-2 presents the state and national attainment statuses for Santa Clara County.

TABLE 3.3-2: STATE AND NATIONAL ATTAINMENT STATUS

POLLUTANT	*STATE DESIGNATION*	*NATIONAL DESIGNATION*
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	--
Lead	Attainment	--
Hydrogen Sulfide	Unclassified	--
Visibility Reducing Particles	Unclassified	--

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2020

Monitoring Data

The BAAQMD operates a regional air quality monitoring network that regularly measures the concentrations of the major air pollutants. Air pollutant monitoring data is available at http://www.arb.ca.gov/adam/welcome.html. Air quality conditions in the SFBAAB have improved significantly since the BAAQMD was created in 1955. Ambient concentrations and the number of days on which the region exceeds standards have declined dramatically. Neither Federal nor State ambient air quality standards have been violated in recent decades for nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and vinyl chloride.

The CARB maintains air quality monitoring stations throughout California. Table 3.3-3 provides the aggregated statistics obtained from the monitoring sites in Santa Clara County between 2016 and 2018 for ozone (1-hour and 8-hour), PM_{10}, and $PM_{2.5}$.

TABLE 3.3-3: AMBIENT AIR QUALITY MONITORING DATA (SANTA CLARA COUNTY)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2018 2017 2016	1 / 0 3 / 0 1 / 0
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.07 ppm for 8 hour	2018 2017 2016	1 / 1 5 / 5 1 / 4
Particulate Matter (PM_{10})	50 ug/m^3 for 24 hours	150 ug/m^3 for 24 hours	2018 2017 2016	12.2 / 0 19.2 / 0 0 / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/33 for 24 hours	2018 2017 2016	16.3 / 16.3 8.2 / 10.8 0.0 / 9.1

NOTES:

PPM = PARTS PER MILLION.

UG/M^3 = MICRONS PER CUBIC METER.

NA= NOT APPLICABLE

** = THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (ADAM) AIR POLLUTION SUMMARIES, 2019.

NOTE: PM_{10} DATA WAS NOT AVAILABLE UNDER COUNTY SUMMARY; PM_{10} DATA WAS TAKEN FROM THE SAN JOSE-JACKSON STREET MONITORING SITE.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals and schools. It also includes long-term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

Because the proposed project is a planning document that does not include exact locations, sizes, or land use type for any individual projects that will occur within the City under the General Plan, there are no specific sensitive locations identified with respect to the proposed project. As a conservative estimate of impacts, sensitive receptors are anticipated to be located directly adjacent to new development.

NATURALLY OCCURRING ASBESTOS

The term asbestos is used to describe a variety of fibrous minerals that, when airborne, can result in serious human health effects. Naturally occurring asbestos is commonly associated with ultramafic rocks and serpentinite. Ultramafic rocks, such as dunite, periodotite, and pyroxenite are igneous rocks comprised largely of iron-magnesium minerals. As they are intrusive in nature, these rocks often undergo metamorphosis, prior to their being exposed on the Earth's surface. The metamorphic rock serpentinite is a common product of the alteration process. Naturally occurring asbestos is mapped in Santa Clara County in two locations: the New Almaden Mine, and the Red Mountain magnesite deposit, neither of which are located within the City of Milpitas. There is no naturally occurring asbestos mapped within Milpitas or the Planning Area.

3.3.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. EPA is responsible for administering the FCAA. The FCAA requires the USEPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS

were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and $PM_{2.5}$ ambient air quality standards indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee (CASAC), consisting of seven members appointed by the USEPA administrator. Reviewing NAAQS is a lengthy undertaking and includes the following major phases: Planning, Integrated Science Assessment (ISA), Risk/Exposure Assessment (REA), Policy Assessment (PA), and Rulemaking. The process starts with a comprehensive review of the relevant scientific literature. The literature is summarized and conclusions are presented in the ISA. Based on the ISA, USEPA staff perform a risk and exposure assessment, which is summarized in the REA document. The third document, the PA, integrates the findings and conclusions of the ISA and REA into a policy context, and provides lines of reasoning that could be used to support retention or revision of the existing NAAQS, as well as several alternative standards that could be supported by the review findings. Each of these three documents is released for public comment and public peer review by the CASAC. Members of CASAC are appointed by the USEPA Administrator for their expertise in one or more of the subject areas covered in the ISA. The committee's role is to peer review the NAAQS documents, ensure that they reflect the thinking of the scientific community, and advise the Administrator on the technical and scientific aspects of standard setting. Each document goes through two to three drafts before CASAC deems it to be final.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutants as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- Ozone: On October 1, 2015, the U.S. EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standard consistent with the current California state standard.

- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.

- NO_2: The national NO_2 standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO_2 concentrations than the existing national standard.

- SO_2: On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb.

- PM: the national annual average $PM_{2.5}$ standard was most recently revised in 2012 following an exhaustive review of new literature pointed to evidence for increased risk of premature mortality at lower $PM_{2.5}$ concentrations than the existing standard.

- Lead: The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. In 2016, the primary and secondary standards were retained.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the USEPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing and implementing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas (maintenance areas are those areas that were in nonattainment that have been redesignated to attainment, under the FCCA). Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM

strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

California Clean Air Act

The CCAA was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. The CARB is the agency responsible for administering the CCAA. The CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

California Air Quality Standards

Although NAAQS are determined by the USEPA, states have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, California has created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing state and federal primary standards for major pollutants are shown in Table 3.3-1.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. The ARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board at a regularly scheduled Board hearing.

In June of 2002, the CARB adopted revisions to the PM_{10} standard and established a new $PM_{2.5}$ annual standard. The new standards became effective in June 2003. Subsequently, staff reviewed

the published scientific literature on ground-level ozone and nitrogen dioxide and the CARB adopted revisions to the standards for these two pollutants. Revised standards for ozone and nitrogen dioxide went into effect on May 17, 2006 and March 20, 2008, respectively. These revisions reflect the most recent changes to the CAAQS.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

CARB Air Quality and Land Use Handbook

The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities. The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate [I] 405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by the CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day" (CARB, 2005).

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for the CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before the CARB can designate a substance as a TAC. To date, the CARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, the CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that 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 (BACT) to minimize emissions.

The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. The CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road

mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, the CARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Other recent milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

LOCAL

Bay Area Air Quality Management District

The BAAQMD attains and maintains air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the BAAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The BAAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the FCAA, FCAAA, and the CCAA.

The BAAQMD has regulated TACs since the 1980s. At the local level, air pollution control or management districts may adopt and enforce CARB's control measures. Under BAAQMD Regulation 2-1 (General Permit Requirements), Regulation 2-2 (New Source Review), and Regulation 2-5 (New Source Review), all nonexempt sources that possess the potential to emit TACs are required to obtain permits from BAAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including new source review standards and air toxics control measures. The BAAQMD limits emissions and public exposure to TACs through a number of programs. The BAAQMD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. In addition, the BAAQMD has adopted Regulation 11, Rules 2 and 14, which address asbestos demolition renovation, manufacturing, and standards for asbestos containing serpentine.

BAAQMD Air Quality Plans

As stated above, the BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB. The BAAQMD prepares ozone attainment plans (OAP) for the national ozone standard and clean air plans (CAP) for the California standard both in coordination with the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG).

With respect to applicable air quality plans, the BAAQMD prepared the 2017 Clean Air Plan (also known as the "Spare the Air: Cool the Climate" plan) to address nonattainment of the national 1-hour ozone standard in the SFBAAB. The purpose of the 2017 Clean Air Plan is to protect public

health and stabilize the climate. The 2017 Clean Air Plan includes a multi-pollutant strategy to reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as greenhouse gases.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed General Plan will have a significant impact on the environment associated with air quality if it will:

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

METHODOLOGY

The analysis presented below is was completed to include both a qualitative and a quantitative approach. As described in Section 2.7.1 of the BAAQMD 2017 CEQA Guidelines, proposed plans (except regional plans) must show the following over the planning period of the plan to result in a less than significant impact:

- Consistency with current air quality plan control measures.
- A proposed plan's projected vehicle miles traveled (VMT) or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.

The qualitative analysis discusses the proposed General Plan's consistency with the BAAQMD's 2017 Clean Air Plan. The quantitative analysis presents the proposed General Plan's VMT projections, which were developed using the VTA Travel Demand Model. The VMT analysis is described in greater detail in Chapter 3.14, Transportation and Circulation.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: General Plan implementation would not conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of criteria pollutants (Less than Significant)

CEQA requires lead agencies to determine whether a project is consistent with all applicable air quality plans. The BAAQMD's most current plan is the 2017 Clean Air Plan. The BAAQMD CEQA Guidelines recommend that lead agencies consider the following questions relative to this consistency determination:

1. Does the project support the primary goals of the of the 2017 Clean Air Plan?
2. Does the project include applicable control measures from the 2017 Clean Air Plan?
3. Does the project disrupt or hinder implementation of the 2017 Clean Air Plan control measures?

The primary goals of the 2017 Clean Air Plan are to protect public health and the climate. The 2017 Clean Air Plan contains 85 individual control measures that describe specific actions to reduce emissions of air and climate pollutants from the full range of emission sources. The control measures are categorized based upon the economic sector framework used by the Air Resources Board for the AB 32 Scoping Plan Update. These sectors include:

- Stationary (Industrial) Sources
- Transportation
- Energy
- Buildings
- Agriculture
- Natural and Working Lands
- Waste Management
- Water
- Super-GHG Pollutants

The proposed project includes an extensive list of policies and actions that are specifically aimed at improving air quality. These policies and actions, which are provided below, are consistent with the intent of the control measures by promoting a compact urban development form, emphasizing infill development, and ensuring that land use patterns do not expose sensitive receptors to pollutant concentrations.

Additionally, the Circulation Element includes a wide range of policies and actions that would effectively reduce vehicle miles travelled per service population throughout the Planning Area, through the use of complete streets and multi-modal transportation systems. These applicable policies and actions are described in greater detail in Section 3.14 (Transportation and Circulation).

The policies and actions included throughout the proposed General Plan cover the full breadth of air quality issues as recommended in the 2017 Clean Air Plan. A primary goal of the 2017 Clean Air Plan is to address public health. The 2017 Clean Air Plan addresses public health through identifying control measures to maximize the reduction in population exposure to air pollutants and by including a category titled *Land Use and Local Impacts Measures* that is intended to address localized impacts of air pollution and to help local jurisdictions to pursue transit-oriented infill development in priority areas.

The 2017 Clean Air Plan's final primary goal of protecting the climate is to reduce greenhouse gases. The General Plan Land Use, Community Design, and Conservation Elements contain policies and actions that would reduce criteria pollutant emissions, odors, health risks, and other emissions. The Land Use, Community Design, and Conservation Elements include policies and actions that are specifically aimed at reducing greenhouse gas emissions/climate change. These policies and actions are provided below. Subsequent development projects proposed within the Planning Area would be subject to all relevant General Plan policies and actions that provide protections for air quality.

If approval of the proposed General Plan would cause the disruption, delay, or otherwise hinder the implementation of any air quality plan control measure, it may be inconsistent with the 2017 Clean Air Plan. The proposed General Plan does not cause the disruption, delay, or otherwise hinder the implementation of any quality plan control measure; therefore, it is consistent with the 2017 Clean Air Plan. All future development and infrastructure projects within the Planning Area would be subject to the above-referenced General Plan goals, policies, and actions, which were adopted to reduce emissions and air quality impacts.

The Planning Area is surrounded by existing urbanized uses to the south, west, and north, and is bisected by two of the most heavily-travelled highway corridors in the San Francisco Bay Area. The proposed General Plan emphasizes a compact, mixed use, transit-oriented development pattern that emphasizes alternative transportation access and multi-modal connectivity throughout the Planning Area and into the surrounding areas.

Implementation of the proposed General Plan, which is consistent with all federal and state guidelines, would have a **less than significant** impact relative to this topic and would be consistent with the 2017 Clean Air Plan.

The BAAQMD's May 2017 CEQA Guidelines also identify thresholds of significance for criteria air pollutants and precursors for planning-level documents. As described in Section 2.7.1 of the 2017 CEQA Guidelines, proposed plans (except regional plans) must show the following over the planning period of the plan to result in a less than significant impact:

- Consistency with current air quality plan control measures.
- A proposed plan's projected vehicle miles traveled (VMT) or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase.

The analysis provided above demonstrates that the proposed project would be consistent with the current air quality plan control measures.

The following describes VMT and population increases associated with implementation of the General Plan.

The proposed General Plan is intended to support and enhance jobs-generating uses within Milpitas, and to assist the City in maintaining a balanced ratio of jobs to housing units within the City. New residential growth under the proposed General Plan would be primarily in the form of multi-family housing, most of which would be in the vicinity of transit resources, including the newly-opened BART station. The Plan is also intended to provide significantly enhanced opportunities for transit ridership in and around Milpitas, which would reduce single-passenger vehicle use, regional commuting, and VMT. Given the jobs-generating focus of the proposed project, the majority of the VMT generated by future development within the Planning Area would be attributed to employment-related trips and VMT associated with new job growth. As such, in order to analyze the proposed project's consistency with the BAAQMD thresholds listed above, this analysis looks at both population growth and employment growth when analyzing relative increases in local VMT.

According to the Kittelson & Associates (the traffic consultant), existing VMT in Milpitas is approximately 1,985,460. Milpitas has an existing population of approximately 76,057. Full buildout of the General Plan could generate up to 37,473 new residents. Milpitas has an existing jobs base of approximately 47,538 jobs. Full buildout of the Planning Area could generate up to 36,795 new jobs in Milpitas.

Table 3.3-4 shows the combined population and jobs growth generated by the proposed project, compared to existing levels within the City. Table 3.3-4 shows citywide VMT and plus-project VMT following buildout of the proposed project.

TABLE 3.3-4: COMBINED JOBS AND HOUSING GROWTH

EXISTING JOBS + POPULATION IN MILPITAS	123,595
NEW JOBS + POPULATION GENERATED BY PROJECT	197,863
PERCENT INCREASE IN JOBS + POPULATION	60.1%

SOURCE: KITTELSON & ASSOCIATES, INC., 2020

TABLE 3.3-5: EXISTING AND PLUS-PROJECT VMT

EXISTING VMT	1,985,460
EXISTING PLUS PROJECT VMT	2,972,767
PERCENT INCREASE IN VMT	49.7%

SOURCE: KITTELSON & ASSOCIATES, INC., 2020

As shown in the two tables above, implementation of the proposed project would result in an approximately 49.7% increase in citywide VMT, compared to a 60.1% increase in combined population and jobs. Therefore, the growth rate associated with the proposed General Plan is higher than the VMT increase associated with it. Coupled with the fact that the addition of project-generated VMT would result in an approximately 3.0% decrease in total VMT per service population (residents plus jobs) by 2040 compared with the General Plan VMT 2040 projections under the existing General Plan, the proposed project would not result in VMT increases that would exceed the adopted thresholds.

The proposed project would further the fundamental goals of the BAAQMD in reducing emissions of criteria pollutants associated with vehicle miles traveled, would assist the City in achieving a more balanced jobs to housing ratio, and would increase opportunities for transit ridership in Milpitas and the surrounding areas. The list below provides those General Plan policies and actions that would minimize criteria pollutant emissions. For these reasons, this impact is considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

Policy LU-3.1: Support regional efforts that promote higher densities near major transit and travel facilities, and reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit. Support local and regional land use decisions that promote safe access to and the use of alternatives to auto transit.

Policy LU-3.2: Continue to utilize planning tools (including specific plans and overlay districts) that promote transit-oriented and mixed-use development objectives near the Milpitas Transit Center.

Policy LU-3.3: Integrate climate change and adaptation planning principles into future updates of the Zoning Code, and other related long-range utilities and facilities planning documents. (See the Safety Element for additional policies related to adaptation, and the Conservation Element for policies related to climate change and climate action).

Policy LU-4.2: Emphasize efforts to reduce regional vehicle miles traveled by supporting land use patterns and site designs that promote active modes of transportation, including walking, biking, and public transit.

Policy LU-4.3: Support conveniently located neighborhood-serving commercial centers that provide desired services to local neighborhoods workers and visitors, reduce automobile dependency, and contribute positively to the surrounding neighborhoods.

Policy LU-4.4: Encourage new development to facilitate pedestrian and bicycle access through techniques such as minimizing building separation from public sidewalks; providing safe, accessible, convenient, and pleasant pedestrian connections; and including secure and convenient bike storage.

Policy LU-5.1: Require new development and redevelopment to be compatible, complementary and, where appropriate, well integrated with existing residential areas. Integrate new large-scale development projects into the fabric of the existing community rather than allowing projects to be insular and self-contained, walled off, or physically divided from surrounding uses. Improve connectivity between neighborhoods and services with new development. Tie circulation systems and open spaces into existing streets and open spaces. Reduce unnecessary barriers and improve connections between neighborhoods and services by retrofitting existing development over time as area improvements or redevelopment occurs.

Policy LU-6.6: Encourage redevelopment and intensification of mixed-use areas by allowing stand-alone vertical mixed-use, or integrated horizontal mixed-use projects in mixed use areas, consistent with the Land Use Map and policies and actions included in this element.

CIRCULATION ELEMENT POLICIES

Policy CIR-2.1: Promote multimodal transportation options by developing an interconnected system of streets, roads, bridges, and highways that provides continuous, efficient, safe and convenient travel for all users regardless of mode, age or ability and encourage users to walk, ride a bicycle, or use transit for shorter, local trips.

Policy CIR-3-1: Coordinate with VTA and BART to design and implement capital improvements that support safety and access to rail stations and bus stops.

Policy CIR-3-2: Coordinate transit planning and provision of transit-supportive infrastructure with Caltrans, VTA, BART, and other service providers to provide seamless service for users across transit modes and to facilitate transfers.

Policy CIR-3-3: Work with local stakeholders and VTA to ensure that paratransit services adequately meet the needs of people with disabilities in Milpitas.

Policy CIR-3-4: Ensure that all transit-supportive infrastructure, sidewalks, and bike lanes are adequately maintained to provide high-quality facilities for users.

Policy CIR-4-1: Encourage a shift to active transportation modes by expanding and enhancing current pedestrian and bicycle facilities to accommodate pedestrians and bicyclists of all ages and abilities and encourage all users to reduce vehicle trips and utilize active transportation options with an increase in density of pedestrian and bicycle-supportive infrastructure.

Policy CIR-4-2: Link and expand City pedestrian and bicycle circulation facilities to existing and planned local and regional networks, with an emphasis on expanding infrastructure options near transit.

Policy CIR 4-3: Encourage walking, biking and transit use by prioritizing and implementing "first-mile/last mile" improvements, wayfinding and educational efforts in the vicinity of the Great Mall transit center, light rail stations, the BART station, and heavily used bus stops.

Policy CIR 4-4: Provide secure bicycle parking and end-of-trip support facilities (publicly accessible lockers, changing rooms and showers) at centers of civic, retail, recreation, education, and work activity.

Policy CIR 4-5: Support building bridges or under-crossings across creek channels, railroad lines and roadways in a manner that will enhance safety, improve network connectivity, and facilitate bicycling and walking between high density residential developments, retail centers, civic buildings, and recreational centers.

Policy CIR 4-6: Eliminate gaps in the pedestrian and bicycle network, especially between neighborhoods, trails that access schools, and areas with higher health disparities.

Policy CIR 5-1: Develop, implement, and monitor vehicle trip reduction requirements for large development projects – including all land use types – to minimize the impact of new development on traffic congestion and to reduce vehicle emissions.

Policy CIR 5-2: Adopt a citywide TDM ordinance to require and encourage vehicle trip reduction at employment sites, businesses, and multi-unit residential facilities, and hire dedicated staff to work closely with communities throughout the City on ongoing education and encouragement efforts.

Policy CIR 5-3: Encourage existing employers to adopt strategies to implement programs to reduce employee vehicle trips, including purchasing passes through VTA's annual transit pass program; providing facilities such as secure bike parking, lockers, changing rooms, and showers; telework, and flexible work schedules.

Policy CIR 5-4: Encourage developers to provide enhanced TDM programs and alternative transportation infrastructure that exceeds minimum requirements in exchange for reduced parking requirements, with a focus on priority development areas and locations in proximity to high capacity transit.

Policy CIR 5-5: Cooperate with other private entities and public agencies to promote local and regional transit serving Milpitas.

Policy CIR 6-1: Develop guidelines for the inclusion of green infrastructure in the design of transportation improvements.

Policy CIR 6-2: Support development of healthier communities through the use of lower- or non-polluting modes of transportation to reduce GHG vehicle emissions and local air pollution levels.

Policy CIR 6-3: Encourage walking and bicycling as strategies to promote public health and reduce the long-term transportation costs of owning and maintaining a vehicle.

Policy CIR 6-4: Prioritize transportation improvements in part based on consideration of benefits to disadvantaged communities.

Policy CIR 6-5: Include a robust, inclusive and interactive community engagement and educational process in transportation planning efforts to help ensure that project will address the needs of local stakeholders, especially disadvantaged populations.

Policy CIR 6-6: Work with stakeholders to encourage the development of electric vehicle charging stations and other alternative fuel infrastructure at publicly-owned locations, near businesses, and employment sites.

Policy CIR 6-7: Develop impact fees to provide revenues to be used to construct pedestrian and bicycle infrastructure that will support new development.

Policy CIR 6-8: Use repaving projects as an opportunity to cost-effectively implement new bicycle facilities in accordance with City plans.

Policy CIR 6-9: Maximize efficient maintenance of transportation infrastructure of all modes, such as coordinating roadway paving or striping projects to include maintenance of pedestrian and bicycle infrastructure.

COMMUNITY DESIGN ELEMENT POLICIES

Policy CD 6-1: Support a complete streets approach to designing new streets and retrofitting existing streets by encouraging streets to provide stimulating settings; improve safe walkability,

bicycling, and transit integration; strengthen connectivity; and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, human-scaled street lighting, and street furniture.

Policy CD 6-3: Consider the street type of all adjacent streets in the development review process to ensure that the design of the site, buildings, and public way respond to the multi-modal priorities for the area.

Policy CD 11-2: Encourage passive solar design and energy-efficient concepts, including, but not limited to natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.

Policy CD 11-5: Encourage the use of building materials that conserve energy and material resources.

Policy CD 11-8: Encourage low-impact development, including but not limited to, bioretention cells/rain gardens, cisterns and rain barrels, green roofs, pervious concrete/porous pavement, bioswales, and media filters.

Policy CD 11-9: Encourage the use of green roofs, which help reduce the heat island effect.

Policy CD 11-10: Consider expanding the City's Green Building Program to include additional incentives, above and beyond expedited building permit processing, for projects that incorporate sustainable design approaches and/or elements that exceed local, regional, and state requirements.

Policy CD 11-11: Continue to apply and expand the Climate Action Plan to increase the energy efficiency of development.

CONVERSATION ELEMENT POLICIES

Policy CON 1-1: Ensure that new development is consistent with the energy objectives and targets identified by the City's Climate Action Plan (CAP).

Policy CON 1-2: Ensure all development projects comply with the mandatory energy efficiency requirements of the California Green Building Standards Code (CALGreen).

Policy CON 1-3: Support innovative green building best management practices including, but not limited to, LEED certification, and encourage project applicants to exceed the most current "green" development standards in the California Code of Regulations (CCR), Title 24, as feasible.

Policy CON 1-4: Require large-scale industrial and manufacturing energy users to implement an energy conservation plan as part of the project review and approval process.

Policy CON 1-5: Consider lifecycle costs when identifying opportunities for the replacement and retrofit of energy efficient technologies when upgrading or maintaining City facilities.

Policy CON 1-6: Reduce the City's energy demand by pursuing the use of alternative energy and fuel-efficient City vehicles and equipment, and strive for a zero-emission City vehicle fleet to the extent feasible and practical.

Policy CON 1-7: Support the production of alternative and renewable energy fueling stations in Milpitas.

Policy CON 1-8: Encourage energy efficiency and conservation through public awareness and educational opportunities.

Policy CON 1-9: Encourage site planning and building techniques that promote energy conservation. Where feasible, encourage projects to take advantage of shade, prevailing winds, landscaping, sunscreens, building orientations, and material choices that reduce energy use.

Policy CON 1-10: Encourage distributed energy resources including solar, fuel cells etc. to provide environmental benefits, as well as energy security, and the support of the grid during peak energy use periods.

Policy CON 1-11: Consider incentive programs such as reduced fees, and permit expedition for projects that exceed mandatory energy requirements, incorporate alternative energy technologies, or support the City's energy objectives.

Policy CON 1-12: Promote incentives from local, state, and federal agencies for improving energy efficiency and expanding renewable energy installations.

Policy CON 1-13: Support projects and programs such as appliance upgrades and the use of electric appliances, and energy storage options that reduce the use of and reliance on natural gas.

Policy CON 7-2: Minimize exposure of the public to toxic or harmful air emissions and odors through requiring an adequate buffer or setback distance between residential and other sensitive land uses and land uses that typically generate air pollutants, toxic air contaminants, or obnoxious fumes or odors, including but not limited to industrial, manufacturing, and processing facilities, high-volume roadways, and industrial rail lines. New sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, churches, and medical facilities shall be located away from existing point sources of air pollution such that excessive levels of exposure do not result in unacceptable health risks. Compliance shall be verified through the preparation of a Health Risk Assessment when deemed necessary by the Planning Director.

Policy CON 7-3: Require projects which generate high levels of air pollutants, such as heavy industrial, manufacturing facilities and hazardous waste handling operations, to incorporate air quality mitigations in their design to reduce impacts to the greatest extent feasible.

Policy CON 7-4: Require projects to adhere to the requirements of the Bay Area Air Quality Management District (BAAQMD).

Policy CON 7-5: Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.

Policy CON 7-6: Coordinate with the California Air Resources Board (CARB) and the Bay Area Air Quality Management District to properly measure air quality emission sources and enforce the standards of the Clean Air Act.

Policy CON 7-7: Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

Policy CON 7-8: Consider the health risks associated with Toxic Air Contaminants (TACs) when reviewing development applications.

Policy CON 7-9: Coordinate with Santa Clara County and nearby cities to implement regional GHG reduction plans and to consolidate efforts to reduce GHGs throughout the county as appropriate.

Policy CON 7-10: Implement policies and action from the Land Use and Circulation Elements to provide mixed-use developments, locate high-density uses near transit facilities, provide neighborhood-serving retail uses convenient to residential neighborhoods, and other Transportation Demand Management (TDM) programs that would reduce vehicle trips and vehicle miles traveled, thus reducing air-pollutant emissions.

Policy CON 7-11: Encourage improvements and design features that reduce vehicle delay such as bus turnouts, and synchronized traffic signals for new development to reduce excessive vehicle emissions caused by idling.

Policy CON 7-12: Encourage and prioritize infrastructure investments and improvements that promote safe walking, bicycling and increased transit ridership.

Policy CON 7-13: Implement energy policies and actions that have co-benefits of reduced air pollution and greenhouse gases by increasing energy efficiency, conservation, and the use of renewable resources.

CIRCULATION ELEMENT ACTIONS

Action CIR-3a: Prioritize, install, and maintain bus stop amenities to enhance the transit user experience, especially for vulnerable populations, including shelters, benches, and lighting.

Action CIR-3b: Support regional planning efforts for the development of mass transit facilities such as transit priority for designated bus rapid transit, transit signal priority, bus queue jump lanes, exclusive bus queue jump lanes, exclusive transit lanes, and other transit preferential treatments, where appropriate.

Action CIR-4a: Prioritize, fund, and implement a comprehensive system of sidewalks, bikeways, and off- street trails that connects all parts of the City as identified in the Bikeway and Pedestrian Master Plan and Trails Master Plan and in accordance with the City of Milpitas Municipal Code.

Action CIR-4b: Invest in and support Safe Routes to School efforts – including infrastructure improvements, education and encouragement programs, and enforcement activities – to encourage walking and bicycling to school and to support the reduction of greenhouse gas emissions and vehicle miles traveled, with an emphasis on areas near schools where higher health disparities are present and traffic conflicts are common.

Action CIR-4c: Support bicycle education programs for people of all ages and abilities.

Action CIR-4d: Distribute the Milpitas Bicycle Map, Trail Map, bicycle safety information and other related materials on the City's web site, at City buildings and schools, and special events.

Action CIR-4e: Update the Streetscape Master Plan goals, policies, and actions to improve the appearance and enjoyment of public streets and sidewalks in Milpitas, particularly with regards to landscaping, street furniture and the identification of significant entryways and corridors.

Action CIR-4f: In conjunction with neighboring jurisdictions, establish a safe and viable bike share program that will serve communities throughout Milpitas.

Action CIR-4g: Adopt policies to ensure that bikeshare and other micromobility modes are safe for the user, do not create significant life-cycle environmental impact, and do not create a public nuisance on sidewalks or other public and private outdoor amenities.

Action CIR-4h: Adopt policies to ensure that bikeshare and other micromobility modes are available in neighborhoods throughout Milpitas, including disadvantaged neighborhoods, but do not create additional access barriers for vulnerable populations.

Action CIR-4i: Develop guidelines and priority locations for implementing enhanced pedestrian crossings and safe, adequate infrastructure for pedestrians and bicyclists.

Action CIR-4j: Modify the Milpitas Zoning Ordinance to require the amount, type, and location of bicycle parking, to be determined based on land use to best serve the needs of employees, customers, and visitors.

Action CIR-4k: Modify the Milpitas Zoning Ordinance to include requirements for new developments to provide end- of-trip facilities such as on-site showers, changing rooms, and clothing storage lockers where feasible.

Action CIR-4l: Require developer contributions toward pedestrian and bicycle capital improvement projects, bicycle parking, and first and last-mile connections to promote active modes of transportation and install needed infrastructure.

Action CIR-4m: Develop a local wayfinding signage system to support the City's bicycle facilities network and guide users to destinations including commercial centers and transit stations.

Action CIR-4n: Provide accessible pedestrian signals and appropriate signal timing to pedestrian crossings at priority locations, including the transit center and BART station, senior residential complexes, civic buildings, schools, libraries, and medical facilities.

Action CIR-4o: Identify pedestrian facilities which are not ADA compliant throughout the City and implement necessary improvements.

Action CIR-4p: Require sidewalks to be provided on both sides of the street throughout the City as a condition of development approval, to ensure pedestrian access that is comfortable, convenient, and serves the needs of all users. Encourage exceedance of minimum standards, especially at locations where large number of pedestrians are anticipated.

Action CIR-4q: Make improvements to roads, signs, and traffic signals as needed to improve accessible, safe, and convenient bicycle and pedestrian travel.

Action CIR-4r: Review City street improvement standards to see if there are ways to decrease high stress walking and bicycling environments and increase walking enjoyment and safety, particularly

with regards to increased sidewalk width, landscape buffers between sidewalks, streets and pedestrian lighting, and other amenities.

Action CIR-4s: Provide bicycle actuated traffic signal detection.

Action CIR-4t: Include evaluation of bicycle and pedestrian facility needs in all planning applications for new developments and major remodeling or improvement projects.

Action CIR-4u: Where appropriate, require new development to provide public access points to the trail system and/or contribute to staging areas.

Action CIR-4v: Encourage existing businesses to provide access to the trail system.

Action CIR-4w: Use existing cul-de-sacs, bridges and other public improvement areas as trail access points wherever possible.

Action CIR-4x: Use existing parks, schools and other public facilities as trail use staging areas wherever possible.

Action CIR-4y: Coordinate with regional and local stakeholders to complete the portion of the San Francisco Bay Trail within the City of Milpitas.

Action CIR-4z: Monitor proposed developments and work with applicants to design projects that preserve the integrity of the identified trail routes.

Action CIR-5a: Provide incentives to developers to unbundle parking from tenant rents.

Action CIR-5b: Explore development of a privately-operated citywide transportation management association to facilitate implementation of TDM strategies on a broader scale and enable participation from small employers and residential complexes.

Action CIR-5c: Encourage flexible strategies to maximize the efficient use of the available parking supply. Review and modify existing City parking requirements to reduce barriers to incoming development.

Action CIR-6a: Design sidewalks and pedestrian pathways using environmental design best practices principles or other techniques to provide safe and comfortable facilities for pedestrians at all times of day and night.

Action CIR-6b: Develop requirements for new commercial and multifamily residential development to provide electric vehicle charging infrastructure.

LAND USE ELEMENT ACTIONS

Action LU-4a: Implement the policies and actions in the Circulation Element that reinforce and implement land use objectives included within this element.

Action LU-4b: Promote collaboration between the Planning, Public Works and Engineering Departments during the City's CIP program process to ensure coordination of infrastructure improvements and alignment with the goals of the General Plan and Bike and Pedestrian Master Plan.

COMMUNITY DESIGN ELEMENT ACTIONS

Action CD-11a: As part of the development review process, ensure that projects incorporate sustainable elements, such as passive solar design, energy-efficient features, water conservation measures, street trees, electric vehicle charging stations, and low impact development features to the extent feasible.

Action CD-11b: Expand the City's Green Building Program to include addition incentives, above and beyond expedited building permit processing, for projects that incorporate sustainable design approaches and/or elements that exceed local, regional, and state requirements. The incentives may include, but are not limited to, additional maximum development density/intensity, lot coverage, building height; and parking reductions.

Action CD-11c: Provide incentives, including, but not limited to, additional maximum development density/intensity, lot coverage, building height; and parking reductions in community benefits programs of specific plans for projects that implement sustainability measures beyond minimum requirements.

CONSERVATION ELEMENT ACTIONS

Action CON-1a: Update the City's Climate Action Plan to achieve the greenhouse gas reduction targets for 2030, and 2050. Updates to the CAP should align the City's GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, SB 375, and Executive Orders S-03-05 and B-30-15.

Action CON-1b: Adopt a City Green-Fleet policy to guide the City in purchasing energy efficient and clean emissions vehicles.

Action CON-1c: Display energy conservation and energy efficiency information including state and local programs, community choice aggregation opportunities, and rebate opportunities on the City's web page.

Action CON-1d: Continue to participate in Silicon Valley Clean Energy (SVCE) whereby city-owned facilities, parks, and streetlights will run on renewable energy sources like wind and solar, and educate and encourage Milpitas residents and businesses to participate in Silicon Valley Clean Energy (SVCE) to reduce greenhouse gas emissions and support statewide alternative energy use.

Action CON-1e: Continue to review all new public and private development projects to ensure compliance with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by California Green Building Standards Code (CALGreen), the General Plan, and the Milpitas Municipal Code Chapter 20 Green Building Regulations.

Action CON-1f: Continue to require all development project applications for new buildings to include a completed LEED or CalGreen Mandatory Measures Checklist.

Action CON-1g: Annually audit and report on the progress toward achieving the Milpitas Climate Action Plan (CAP) goals of reducing community-wide emissions levels by 2030 and 2050. The audit should be publicly available on the City's website, and shall also be presented to the Milpitas Planning Commission and City Council.

Action CON–1h: Periodically review and report on the effectiveness of the measures outlined in the CAP and the strategies in this Element. Institutionalize sustainability by developing a methodology to ensure all environmental, social and lifecycle costs are considered in project, program, policy and budget decisions.

Action CON-7a: As the City replaces landscaping equipment and other mechanical equipment, prioritize as appropriate the purchasing of equipment that would reduce emissions and energy use.

Action CON-7b: Provide regional and local air-quality information on the City's website, including links to the Bay Area Air Quality Management District, the California Air Resources Board, and other environmentally-focused internet sites, and provide information regarding Spare the Air Days.

Action CON-7c: Require site-specific air quality Health Risk Assessments (HRAs) for developments that would place sensitive receptors closer than 500 feet from the edge of a regional roadway facility (including I-680, I-880, and SR-237), or for development projects that would place significant point sources of air pollution such as gas station and dry cleaning facilities, or other industrial facilities that emit toxic air contaminates TACs within 500 feet of a sensitive receptor.

Action CON-7d: Continue to seek the cooperation of the BAAQMD to monitor emissions from identified point sources that impact the community. In addition, for sources not within the regulatory jurisdiction of the City, seek cooperation from the applicable regulatory authority to encourage the reduction of emissions and dust from the pollutant source.

Action CON-7e: Require dust control measures, including those included in the Santa Clara Valley Non-point Source Pollution Control Program, and BAAQMD's Best Management Practices for fugitive dust control during construction.

Action CON-7f: Use the BAAQMD "Air Quality Guidelines", as amended, or replaced, in identifying thresholds, evaluating the potential project and cumulative impacts, and determining appropriate mitigation measures.

Review development, infrastructure, and planning projects for consistency with BAAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address BAAQMD, and General Plan requirements, which includes analysis and identification of:

- *Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;*
- *Potential exposure of sensitive receptors to toxic air contaminants;*
- *Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and*
- *Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.*

Action CON-7g: Continue implementation of the City's Municipal Code Chapter 15, Fireplace/Woodsmoke Pollution, in order to improve and maintain air quality conditions in the City.

Action CON-7h: Prior to the entitlement of a project that may be an air pollution point source, such as a manufacturing facility, the developer shall provide documentation that the use is located and appropriately separated from residential areas and sensitive receptors (e.g., homes, schools, and hospitals).

Action CON-7i: Require construction activity plans, and grading and drainage plans to include and/or provide for dust management to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Project applicants, or their assigned agents/contractors, shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project grading and construction.

Impact 3.3-2: General Plan implementation would expose sensitive receptors to substantial pollutant concentrations (Less than Significant)

The BAAQMD has identified local community risks from air pollutants to include exposure to TACs and $PM_{2.5}$ concentrations. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health and $PM_{2.5}$ can cause a wide range of health effects (e.g., aggravating asthma and bronchitis, causing visits to the hospital for respiratory and cardiovascular systems, and contributing to heart attacks and deaths). Common stationary source types of TAC and $PM_{2.5}$ emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to BAAQMD permit requirements. The other, often more significant, common source type is on-road motor vehicles on freeways and roads such as trucks and cars, and off-road sources such as construction equipment, ships, and trains. Implementation of the proposed General Plan would have the potential of introducing new sources of TAC and $PM_{2.5}$ emissions within the City as well as siting new sensitive receptors, such as new homes in close proximity to existing sources of TAC and $PM_{2.5}$ emissions.

Health risks associated with TACs are most pronounced in the areas adjacent to freeway segments. Under the Community Air Risk Evaluation (CARE) program, the BAAQMD has designated certain areas as "Impacted Communities" if the following occur: the areas (1) are close to or within areas of high TAC emissions; (2) have sensitive populations, defined as youth and seniors, with significant TAC exposures; and (3) have significant poverty. Milpitas is not mapped by the BAAQMD as an Impacted Community under the CARE program.

Regardless of the existing health risks associated with TACs, the BAAQMD CEQA Guidelines provide recommendations for all communities to ensure reduced health risks associated with TACs. The proposed General Plan includes policies that are intended to minimize exposure of TACs to sensitive receptors (see below).

The *Air Quality and Land Use Handbook: A Community Health Perspective*, adopted by CARB, May 2005 was prepared to address the siting of sensitive land uses in close proximity to sources of TAC emissions that include the following sources within the City:

- Within 500 feet of Highway 680 and Highway 880;
- Within 300 feet of dry cleaning operations that use perchloroethylene; and
- Within 50 feet of a typical gas station.

The proposed General Plan includes policies and programs that would minimize exposure to TAC and $PM_{2.5}$ concentrations within the City. These policies and actions are included within various elements of the proposed project. For example, Policy CON 7-2 requires adequate buffer or setback distances between sensitive land uses and potential sources of toxic or harmful air emissions. Policy CON 7-3 requires projects that generate high levels of pollutants to incorporate air quality mitigations into their design. Action CO-7c requires site-specific air quality Health Risk Assessments (HRAs) for developments that would place sensitive receptors closer than 500 feet from the edge of a regional roadway facility (including I-680, I-880, and SR-237), or for development projects that would place significant point sources of air pollution such as gas station and dry cleaning facilities, or other industrial facilities that emit toxic air contaminates TACs within 500 feet of a sensitive receptor. In addition, all new sources of TAC emissions within the City would be required to obtain an Air Permit from BAAQMD that includes analysis of any TAC or $PM_{2.5}$ emissions created from the new source and the potential health impacts to the nearest sensitive receptor.

Individual projects will be required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. In the event that future individual projects may result in exposure to TACs by sensitive receptors, these future projects would be required to implement mitigation measures to reduce the impact to a less than significant level, consistent with BAAQMD requirements. Therefore, compliance with the applicable policies and programs in the proposed General Plan as well applicable BAAQMD rules and regulations, would minimize the potential exposure of sensitive receptors to substantial concentrations of TACs and $PM_{2.5}$ within the City, and impacts would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION ELEMENT POLICIES

Policy CON 7-2: Minimize exposure of the public to toxic or harmful air emissions and odors through requiring an adequate buffer or setback distance between residential and other sensitive land uses and land uses that typically generate air pollutants, toxic air contaminants, or obnoxious fumes or odors, including but not limited to industrial, manufacturing, and processing facilities, high-volume roadways, and industrial rail lines. New sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, churches, and medical facilities shall be located away from existing point sources of air pollution such that excessive levels of exposure do not result in unacceptable health risks. Compliance shall be verified through the preparation of a Health Risk Assessment when deemed necessary by the Planning Director.

Policy CON 7-3: Require projects which generate high levels of air pollutants, such as heavy industrial, manufacturing facilities and hazardous waste handling operations, to incorporate air quality mitigations in their design to reduce impacts to the greatest extent feasible.

Policy CON 7-4: Require projects to adhere to the requirements of the Bay Area Air Quality Management District (BAAQMD).

Policy CON 7-5: Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.

Policy CON 7-6: Coordinate with the California Air Resources Board (CARB) and the Bay Area Air Quality Management District to properly measure air quality emission sources and enforce the standards of the Clean Air Act.

Policy CON 7-7: Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

Policy CON 7-8: Consider the health risks associated with Toxic Air Contaminants (TACs) when reviewing development applications.

Policy CON 2-5: Facilitate the preservation of existing trees, the planting of additional street trees, and the replanting of trees lost through disease, new construction or by other means.

CONSERVATION ELEMENT ACTIONS

Action CON-7c: Require site-specific air quality Health Risk Assessments (HRAs) for developments that would place sensitive receptors closer than 500 feet from the edge of a regional roadway facility (including I-680, I-880, and SR-237), or for development projects that would place significant point sources of air pollution such as gas station and dry cleaning facilities, or other industrial facilities that emit toxic air contaminates TACs within 500 feet of a sensitive receptor.

Action CON-7d: Continue to seek the cooperation of the BAAQMD to monitor emissions from identified point sources that impact the community. In addition, for sources not within the regulatory jurisdiction of the City, seek cooperation from the applicable regulatory authority to encourage the reduction of emissions and dust from the pollutant source.

Action CON-7e: Require dust control measures, including those included in the Santa Clara Valley Non-point Source Pollution Control Program, and BAAQMD's Best Management Practices for fugitive dust control during construction.

Action CON-7f: Use the BAAQMD "Air Quality Guidelines", as amended, or replaced, in identifying thresholds, evaluating the potential project and cumulative impacts, and determining appropriate mitigation measures.

Review development, infrastructure, and planning projects for consistency with BAAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address BAAQMD, and General Plan requirements, which includes analysis and identification of:

- *Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;*
- *Potential exposure of sensitive receptors to toxic air contaminants;*
- *Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and*

- *Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.*

Action CON-7g: Continue implementation of the City's Municipal Code Chapter 15, Fireplace/Woodsmoke Pollution, in order to improve and maintain air quality conditions in the City.

Action CON-7h: Prior to the entitlement of a project that may be an air pollution point source, such as a manufacturing facility, the developer shall provide documentation that the use is located and appropriately separated from residential areas and sensitive receptors (e.g., homes, schools, and hospitals).

Action CON-7i: Require construction activity plans, and grading and drainage plans to include and/or provide for dust management to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Project applicants, or their assigned agents/contractors, shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project grading and construction.

Action CON-2e: Identify high priority areas for civic tree planting activities that provide the greatest benefits to the community and provides urban canopy coverage in areas of the city that are currently underserved by street trees and trees within public spaces.

Impact 3.3-3: General Plan implementation would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people) (Less than Significant)

ODORS

Objectionable odors can be generated from certain types of commercial and/or industrial land uses. Common sources of odors include wastewater treatment plants, landfills, composting facilities, refineries, and chemical plants. In general, residential land uses are not associated with odor generation, but they do serve as sensitive receptors. Odors rarely have direct health impacts, but they can be very unpleasant and can lead to anger and concern over possible health effects among the public. Each year the BAAQMD receives thousands of citizen complaints about objectionable odors.

With respect to other emissions, future development under the proposed General Plan would be required to comply with AQMP, SIP, CARB, BAAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan policies and actions.

The BAAQMD CEQA Guidelines recommendation for assessing plan level odor impacts is to "identify the location of existing and planned odor sources in the plan area and policies to reduce potential odor impacts in the plan area." The potential odor sources known to exist in Milpitas are the Newby Island Landfill & Composting operation, the Santa Clara / San Jose Wastewater Facility AKA Water Pollution Control Plant (WPCP), the Zanker Landfill & Composting Facility, and the Zanker Organic Digester Facility (ZWED). Their 2013-2015 records showed 90% of confirmed complaints are from

Newby Island Landfill & Composting operation, while ZWED and WPCP account for the remaining 10%.

The proposed General Plan does not propose any land uses within the vicinity of this or any other potential source of objectionable odors. Individual projects that have the potential to generate significant objectionable odors would be required to undergo individual CEQA review. In addition, the General Plan policies and actions listed below would further minimize the potential for other emissions (such as odors) to adversely affect a substantial number of people. Therefore, implementation of the proposed General Plan would have a **less than significant** impact relative to this topic.

GENERAL PLAN MINIMIZATION MEASURES

CONVERSATION ELEMENT POLICIES

Policy CON 7-2: Minimize exposure of the public to toxic or harmful air emissions and odors through requiring an adequate buffer or setback distance between residential and other sensitive land uses and land uses that typically generate air pollutants, toxic air contaminants, or obnoxious fumes or odors, including but not limited to industrial, manufacturing, and processing facilities, high-volume roadways, and industrial rail lines. New sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, churches, and medical facilities shall be located away from existing point sources of air pollution such that excessive levels of exposure do not result in unacceptable health risks. Compliance shall be verified through the preparation of a Health Risk Assessment when deemed necessary by the Planning Director.

Policy CON 7-3: Require projects which generate high levels of air pollutants, such as heavy industrial, manufacturing facilities and hazardous waste handling operations, to incorporate air quality mitigations in their design to reduce impacts to the greatest extent feasible.

Policy CON 7-4: Require projects to adhere to the requirements of the Bay Area Air Quality Management District (BAAQMD).

Policy CON 7-5: Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.

Policy CON 7-6: Coordinate with the California Air Resources Board (CARB) and the Bay Area Air Quality Management District to properly measure air quality emission sources and enforce the standards of the Clean Air Act.

Policy CON 7-7: Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

CONVERSATION ELEMENT ACTIONS

Action CON-7c: Require site-specific air quality Health Risk Assessments (HRAs) for developments that would place sensitive receptors closer than 500 feet from the edge of a regional roadway facility (including I-680, I-880, and SR-237), or for development projects that would place significant point

sources of air pollution such as gas station and dry cleaning facilities, or other industrial facilities that emit toxic air contaminates TACs within 500 feet of a sensitive receptor.

Action CON-7d: Continue to seek the cooperation of the BAAQMD to monitor emissions from identified point sources that impact the community. In addition, for sources not within the regulatory jurisdiction of the City, seek cooperation from the applicable regulatory authority to encourage the reduction of emissions and dust from the pollutant source.

Action CON-7g: Continue implementation of the City's Municipal Code Chapter 15, Fireplace/Woodsmoke Pollution, in order to improve and maintain air quality conditions in the City.

Action CON-7h: Prior to the entitlement of a project that may be an air pollution point source, such as a manufacturing facility, the developer shall provide documentation that the use is located and appropriately separated from residential areas and sensitive receptors (e.g., homes, schools, and hospitals).

Action CON-7i: Require construction activity plans, and grading and drainage plans to include and/or provide for dust management to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Project applicants, or their assigned agents/contractors, shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project grading and construction.

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This section describes biological resources in the Planning Area. This section provides a background discussion of the bioregions, regionally important habitat and wildlife, and special status species found in the vicinity of Milpitas. This section is organized with an environmental setting, regulatory setting, and impact analysis.

One comment on this environmental topic was received during the NOP comment period. The California Department of Fish and Wildlife (CDFW) provided comments about potential impacts to special status species and sensitive natural habitat. The letter provided general information on the types of impacts that could occur. These comments have been addressed throughout this EIR chapter.

KEY TERMS

The following key terms may be used throughout this section to describe biological resources and the framework that regulates them:

Hydric Soils. One of the three wetland identification parameters, according to the Federal definition of a wetland, hydric soils have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season. There are approximately 2,000 named soils in the United States that may occur in wetlands.

Hydrophytic Vegetation. Plant types that typically occur in wetland areas. Nearly 5,000 plant types in the United States may occur in wetlands. Plants are listed in regional publications of the U.S. Fish and Wildlife Service (USFWS) and include such species as cattails, bulrushes, cordgrass, sphagnum moss, bald cypress, willows, mangroves, sedges, rushes, arrowheads, and water plantains.

Sensitive Natural Community. A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, State, or Federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact. The California Department of Fish and Wildlife (CDFW) tracks sensitive natural communities in the California Natural Diversity Database (CNDDB).

Special-Status Species. Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by Federal, State, or other agencies. Some of these species receive specific protection that is defined by Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term “special status” includes those species that are:

- Federally listed or proposed for listing under the Federal Endangered Species Act (50 CFR 17.11-17.12);
- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
- State listed or proposed for listing under the California Endangered Species Act (14 CCR 670.5);
- Species listed by the USFWS or the CDFW as a species of concern (USFWS), rare (CDFW), or of special concern (CDFW);
- Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);
- Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

Waters of the U.S. The Federal government defines waters of the U.S. as "lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows" [33 C.F.R. §328.3(a)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the U.S. Army Corps of Engineers (USACE) as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

Wetlands. Wetlands are ecologically complex habitats that support a variety of both plant and animal life. The Federal government defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Wetlands require wetland hydrology, hydric soils, and hydrophytic vegetation. Examples of wetlands include freshwater marsh, seasonal wetlands, and vernal pool complexes that have a hydrologic link to waters of the U.S.

3.4.1 ENVIRONMENTAL SETTING

The City of Milpitas is located in northern Santa Clara County, California approximately 30 miles southeast of San Francisco and six miles north of San Jose. Milpitas extends between the south end of the San Francisco Bay and the Low Buellis Hills of the Mount Diablo Range.

BIOREGIONS

Milpitas is located within the Bay Area/Delta bioregion. The Bay Area/Delta Bioregion extends from the Pacific Ocean to the Sacramento Valley and San Joaquin Valley bioregions to the northeast and southeast, and a short stretch of the eastern boundary joins the Sierra Bioregion at Amador and Calaveras counties. The bioregion is bounded by the Klamath/North Coast on the north and the Central Coast Bioregion to the south. The Bay Area/Delta Bioregion is one of the most populous areas of the State, encompassing the San Francisco Bay Area and the Sacramento-

San Joaquin River Delta. The water that flows through the Delta supplies two-thirds of California's drinking water, irrigating farmland, and sustaining fish and wildlife and their habitat. The bioregion fans out from San Francisco Bay in a jagged semi-circle that takes in all or part of 12 counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Joaquin, San Mateo, Santa Clara, Solano, Sonoma, and parts of Sacramento and Yolo. The habitats and vegetation of the Bay Area/Delta Bioregion are as varied as the geography.

CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

The California Wildlife Habitat Relationship (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly-occurring birds, mammals, reptiles and amphibians. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the CWHR System: 27 tree, 12 shrub, 6 herbaceous, 4 aquatic, 8 agricultural, 1 developed, and 1 non-vegetated.

According to the California Wildlife Habitat Relationship System there are 14 cover types (wildlife habitat classifications) in the Planning Area out of 59 found in the State. These include: AGS - Annual Grassland, BOW - Blue Oak Woodland, COW - Coastal Oak Woodland, VOW - Valley Oak Woodland, CSC - Coastal Scrub, CRP - Cropland, IGR - Irrigated Grain Crops, DGR - Dryland Grain Crops, VIN - Vineyard, FEW - Fresh Emergent Wetland, LAC - Lacustrine, MHW - Montane Hardwood, VRI - Valley Foothill Riparian, and URB - Urban. Table 3.4-1 identifies the total area by acreage for each cover type (wildlife habitat classification) found in Milpitas. Figure 3.4-1 illustrates the location of each cover type (wildlife habitat classification) within Milpitas. A brief description of each cover type follows.

TABLE 3.4-1: COVER TYPES - CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

Cover Type	Acres within City	Acres within SOI	Total Acres
AGS - Annual Grassland	1,283.51	4,096.59	5,380.09
BOW - Blue Oak Woodland	11.98	26.02	38.00
COW - Coastal Oak Woodland	66.48	455.42	521.90
VOW - Valley Oak Woodland	2.83	1.61	4.45
CSC - Coastal Scrub	--	11.14	11.14
CRP - Cropland	39.14	--	39.14
IGR - Irrigated Grain Crops	1.11	--	1.11
DGR - Dryland Grain Crops	0.44	--	0.44
VIN - Vineyard	0.44	--	0.44
FEW - Fresh Emergent Wetland	34.63	--	34.63
LAC - Lacustrine	48.93	2.89	51.82
MHW - Montane Hardwood	31.99	28.46	60.45
VRI - Valley Foothill Riparian	66.96	104.80	171.76
URB - Urban	7,094.00	314.97	7,408.97
Total	**8,682.46**	**5,041.89**	**13,724.35**

SOURCE: CITY OF MILPITAS GIS, SANTA CLARA COUNTY GIS, ALAMEDA COUNTY GIS, USGS NATIONAL HYDROGRAPHY DATASET, CAL ATLAS, AND FRAP VEGETATION (FVEG15-1), 2016.

Developed Cover Types

Cropland includes a variety of sizes, shapes, and growing patterns. Field corn can reach ten feet while strawberries are only a few inches high. Although most crops are planted in rows, alfalfa hay and small grains (rice, barley, and wheat) form dense stands with up to 100 percent canopy closure. Most croplands support annuals, planted in spring and harvested during summer or fall. In many areas, second crops are commonly planted after harvesting the first. Wheat is planted in fall and harvested in late spring or early summer. Overwintering of sugar beets occurs in the Sacramento Valley, with harvesting in spring after the soil dries. Croplands are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Climate influences the type of crops grown. Within the Milpitas city limits and sphere of influence, there are 39.14 acres of cropland habitat.

Irrigated Grain Crops includes a variety of sizes, shapes and growing patterns. Field corn can reach ten feet tall while dry beans are only several inches tall. Most irrigated grain and seed crops are grown in rows. Some may form 100 percent canopy while others may have significant bare areas between rows. All seed and grain crops are annuals. They are usually planted in spring and harvested in summer or fall. However, they may be planted in rotation with other irrigated crops and sometimes winter wheat or barley may be planted after harvest of a previous crop in the fall, dry farmed (during the wet winter and early spring months) or they may be irrigated, and then harvested in the late spring. Irrigated grain and seed crops are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Corn requires better soils than barley, which can grow on poor quality soils, such as, saline and alkaline soils. Rice and barley can do well on clay soils not suitable for other crops. Leaching can remove contaminants in areas of high salt or alkali levels, making the soils highly productive. This has occurred extensively in the San Joaquin and Imperial valleys. Climate also influences the types of crops grown. only hardy crops such as potatoes, barley, cereal rye, and wheat do well in the short growing season in the Klamath Basin; whereas, in the Imperial Valley, a variety of crops grow over an eleven month, frost-free growing season. Within the Milpitas city limits and sphere of influence, there are 1.11 acres of irrigated grain crop habitat.

Dryland Grain Crops includes a variety of sizes, shapes, and growing patterns. Field corn can reach ten feet while strawberries are only a few inches high. Although most crops are planted in rows, alfalfa hay and small grains (rice, barley, and wheat) form dense stands with up to 100 percent canopy closure. Most croplands support annuals, planted in spring and harvested during summer or fall. In many areas, second crops are commonly planted after harvesting the first. Wheat is planted in fall and harvested in late spring or early summer. Overwintering of sugar beets occurs in the Sacramento Valley, with harvesting in spring after the soil dries. Croplands are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Corn requires better soils than barley, which can grow on poor quality soils, and

rice does well on clay soils not suitable for other crops. Leaching can remove contaminants in areas of high salt or alkali levels, making the soils highly productive. This has occurred extensively in the San Joaquin and Imperial Valleys. Climate also influences the type of crops grown. Only hardy crops such as potatoes, barley, and wheat do well in the short growing season in Klamath Basin; whereas, in the Imperial Valley, a variety of crops grow over an eleven month, frost-free growing season. Within the Milpitas city limits and sphere of influence, there are 0.44 acres of dryland grain crop habitat.

Vineyards are composed of single species planted in rows, usually supported on wood and wire trellises. Vines are normally intertwined in the rows but open between rows. Rows under the vines are usually sprayed with herbicides to prevent growth of herbaceous plants. Between rows of vines, grasses and other herbaceous plants may be planted or allowed to grow as a cover crop to control erosion. Vineyards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. All are irrigated. Most vineyards are sprinkler irrigated. Large numbers of vineyards are irrigated by drip or trickle irrigation systems. Most vineyards are in valley or foothill areas. Within the Milpitas city limits and sphere of influence, there are 0.44 acres of vineyard habitat.

Urban habitats are not limited to any particular physical setting. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. Within the Milpitas city limits and sphere of influence, there are 7,408.97 acres of urban habitat.

Herbaceous Cover Types

Annual Grassland habitat occurs mostly on flat plains to gently rolling foothills. Climatic conditions are typically Mediterranean, with cool, wet winters and dry, hot summers. The length of the frost-free season averages 250 to 300 days. Annual precipitation is highest in northern California. Within the Milpitas city limits and sphere of influence, there are 5,380.09 acres of annual grassland habitat.

Fresh emergent wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. They are most common on level to gently rolling topography. They are found in various depressions or at the edge of rivers or lakes. Soils are predominantly silt and clay, although coarser sediments and organic material may be intermixed. In some areas organic soils (peat) may constitute the primary growth medium. Climatic conditions are highly variable and range from the extreme summer heat to winter temperatures well below freezing. Within the Milpitas city limits and sphere of influence, there are 34.63 acres of fresh emergent wetland habitat.

Hardwood Woodland Cover Types

Blue oak woodland habitats are usually associated with shallow, rocky, infertile, well-drained soils from a variety of parent materials. Blue oaks are well adapted to dry, hilly terrain where the water table is usually unavailable. The climate is Mediterranean, with mild wet winters and hot dry summers. Climatic extremes are relatively great in these woodlands, because they have a considerable geographic and elevational range. Average annual precipitation varies from 20 to 40 inches over most of the blue oak's range, although extremes are noted from 10 inches in Kern County to 60 inches in Shasta County. Blue oaks have an unusual tolerance of severe drought, even shedding their leaves during periods of extreme moisture stress. This survival trait contributes to its pattern of distribution, as it competes most successfully with other tree species on drier sites. Mean maximum temperatures are from 75 to 96 °F in summer, and minima are from 29 to 42 °F in winter. The growing season ranges from 6 months in the north to the entire year in the south, with 175 to 365 frost-free days. Within the Milpitas city limits and sphere of influence, there are 38.00 acres of blue oak woodland habitat.

Coastal oak woodland habitats occupy a variety of Mediterranean type climates that vary from north to south and west to east. Precipitation occurs in the milder winter months, almost entirely as rainfall, followed by warm to hot, dry summers. Near the coast, the summers are tempered by fogs and cool, humid sea breezes. Mean annual precipitation varies from about 40 inches in the north to about 15 inches in southern and interior regions. Mean minimum winter temperatures are 29 to 44 °F, and the mean maximum summer temperatures are 75 to 96 °F. The growing season ranges from six months (180 frost-free days) in the north to the entire year in mild coastal regions to the south. The soils and parent material on which coastal oak woodlands occur are extremely variable. In San Luis Obispo County alone they are found on over fifteen different parent materials ranging from unconsolidated siliceous sand to diatomaceous earth to serpentinite to volcanic ash and basalt. Coastal oak woodlands generally occur on moderately to well-drained soils that are moderately deep and have low to medium fertility. Within the Milpitas city limits and sphere of influence, there are 521.90 acres of coastal oak woodland habitat.

Valley oak woodland habitats occur in a wide range of physiographic settings but is best developed on deep, well-drained alluvial soils, usually in valley bottoms. Most large, healthy valley oaks are probably rooted down to permanent water supplies. Stands of valley oaks are found in deep sills on broad ridge-tops in the southern Coast Range. Where this type occurs near the coast, it is usually found away from the main fog zone. The climate is Mediterranean, with mild, wet winters and hot, dry summers. Within the Milpitas city limits and sphere of influence, there are 4.45 acres of valley oak woodland habitat.

Montane hardwood habitats are found on a wide range of slopes, especially those that are moderate to steep. Soils are for the most part rocky, alluvial, coarse textured, poorly developed, and well drained. Soil depth classes range from shallow to deep. L Canyon live oak, incense-cedar, and a few other associates are also found on ultrabasic soils. Mean summer temperatures in the Montane Hardwood habitat vary between 68 and 77 °F and mean winter temperatures between 37 and 45 °F. Frost-free days range from 160 to 230. Annual precipitation varies from 110 inches in

the northern Coast Range to 36 inches in the mountains of southern California. Within the Milpitas city limits and sphere of influence, there are 60.45 acres of montane hardwood habitat.

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. Valleys provide deep alluvial soils and a high water table. The substrate is coarse, gravelly, or rocky soils more or less permanently moist, but probably well aerated. Frost and short periods of freezing occur in winter (200 to 350 frost-free days). This habitat is characterized by hot, dry summers and mild and wet winters. Temperatures range from 75 to 102 °F in the summer to 29 to 44 °F in the winter. Average precipitation ranges from 6 to 30 inches, with little or no snow. The growing season is 7 to 11 months. Within the Milpitas city limits and sphere of influence, there are 171.76 acres of valley-foothill riparian habitat.

Shrub-Dominated Cover Types

Coastal scrub habitat is typified by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Coastal Scrub seems to tolerate drier conditions than its associated habitats. It is typical of areas with steep, south-facing slopes; sandy, mudstone or shale soils; and average annual rainfall of less than 12 inches. However, coastal scrub habitat also regularly occurs on stabilized dunes, flat terraces, and moderate slopes of all aspects where average annual rainfall is up to 24 inches. Stand composition and structure differ markedly in response to these physiographic features. Within the Milpitas city limits and sphere of influence, there are 11.14 acres of coastal scrub habitat.

Aquatic Cover Types

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. These habitats may occur in association with any terrestrial habitats, Riverine, or Fresh Emergent Wetlands. They may vary from small ponds less than one acre to large areas covering several square miles. Depth can vary from a few inches to hundreds of feet. Typical lacustrine habitats include permanently flooded lakes and reservoirs, and intermittent lakes and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not. Within the Milpitas city limits and sphere of influence, there are 51.82 acres of lacustrine habitat.

SPECIAL-STATUS SPECIES

The following discussion is based on a background search of special-status species that are documented in the CNDDB, the California Native Plant Survey (CNPS) Inventory of Rare and Endangered Plants, and the USFWS endangered and threatened species lists. The background search was regional in scope and focused on the documented occurrences within the 12-Quad (approximately 15 miles) region of the Planning Area. Because the Planning Area overlaps two USGS quads, the standard 9-quad search parameter was extended to 12 quads. The 12-Quad region includes the following quads: Newark, Niles, La Costa Valley, Mendenhall Springs, Mountain

View, Milpitas, Calaveras Reservoir, Mt. Day, Cupertino, San Jose West, San Jose East, and Lick Observatory. The Planning Area is located within the Milpitas and Calaveras Reservoir quads.

Special Status Plants

The search revealed documented occurrences of 42 special status plant species within 12-Quad of Milpitas. Table 3.4-2 provides a list of special-status plant species that are documented within the 12-Quad region of the Planning Area, including the species name, their habitat, and current protective status. Figures 3.4-2 illustrate the special status species located within the 12-Quad (approximately 15 miles) region of the Planning Area. Figure 3.4-3 illustrates the special status species located within one mile of Milpitas.

TABLE 3.4-2: SPECIAL STATUS PLANTS PRESENT OR POTENTIALLY PRESENT

SPECIES	*STATUS*	*HABITAT*
Astragalus tener var. tener alkali milk-vetch	--/--/1B.2	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands. 1-170 M.
Malacothamnus arcuatus arcuate bush-mallow	--/--/1B.2	Chaparral and cismontane woodland. Threatened by alteration of fire regimes. 15-355 M.
Amsinckia lunaris Bent-flowered fiddleneck	--/--/1B.2	Coastal bluff scrub, Cismontane woodland, and Valley and foothill grassland. 3-500 M.
Balsamorhiza macrolepis big-scale balsamroot	--/--/1B.2	Chaparral, cismontane woodland, valley and foothill grassland, sometimes serpentinite. Threatened by grazing, potentially threatened by residential or recreational development, energy development and non-native plants. 90-1,555 M.
Atriplex depressa brittlescale	--/--/1B.2	Alkaline, clay. Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools. 1-320 M.
Puccinellia simplex California alkali grass	--/--/1B.2	Alkaline, vernally mesic; sinks, flats, and lake margins. Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools. 2-930 M.
Suaeda californica California seablite	FE/--/1B.1	Marshes and swamps (coastal salt). 0-15 M.
Campanula exigua chaparral harebell	--/--/1B.2	Chaparral (rocky, usually serpentinite). 275-1,250 M.
Senecio aphanactis Chaparral ragwort	--/--/2B.2	Sometimes alkaline. Chaparral, Cismontane woodland, Coastal scrub. 15-800 M.
Centromadia parryi ssp. congdonii	--/--/1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 1-230 M.

SPECIES	*STATUS*	*HABITAT*
Congdon's tarplant		
Lasthenia conjugens Contra Costa goldfields	FE/--/1B.1	Valley and foothill grassland, vernal pools, cismontane woodland. Extirpated from most of its range; extremely endangered. Vernal pools, swales, low depressions, in open grassy areas. 1-445 M.
Fritillaria liliacea fragrant fritillary	--/--/1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland, often serpentinite. 3-410 M.
Plagiobothrys glaber hairless popcornflower	--/--/1A	Meadows and seeps (alkaline), mashes and swamps (coastal salt). 15-180 M.
Malacothamnus hallii Hall's bush-mallow	--/--/1B.2	Chaparral. Some populations on serpentine. 10-550M.
Eryngium arsitulatum var. hooveri Hoover's button-celery	--/--/1B.1	Meadows and seeps (alkaline), marshes and swamps (coastal salt). 15-180 M.
Eryngium arsitulatum var. hooveri Hoover's button-celery	--/--/1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt). 15-180 M.
Delphinium californicum ssp. Interius Hospital Canyon larkspur	--/--/1B	Cismontane woodland, chaparral. In wet, boggy meadows, openings in chaparral and in canyons. 225-1060 M.
Legenere limosa Legenere	--/--/1B	Vernal pools. Threatened by grazing, road widening, non-native plants, and development. 1-880 M.
Atriplex minuscula Lesser saltscale	--/--/1B.1	Alkaline, sandy soils. Chenopod scrub, playas, valley and foothill grassland. May-October
Hoita strobilina Loma Prieta hoita	--/--/1B.1	Chaparral, cismontane woodland, riparian woodland. Threatened by urbanization. 30-860 M.
Spergularia macrotheca var. longistyla Long-styled sand-spurrey	--/--/1B.2	Alkaline: Meadows and seeps; Marshes and swamps. Threatened by urbanization, habitat alteration, agriculture, and hydrologic alterations. Blooming period Feb-May(June). 0-255M.
Sidalcea malachroides maple-leaved checkerbloom	--/--/4.2	Often in disturbed areas, broad-leafed upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, riparian woodland. 0-730 M.

SPECIES	*STATUS*	*HABITAT*
Streptanthus albidus ssp. albidus Metcalf Canyon jewelflower	FE/--/1B.1	Valley and foothill grassland (serpentinite). Threatened by residential development, road construction, vehicles, and non-native plants. 45-800 M.
Streptanthus albidus ssp. peramoenus most beautiful jewel-flower	--/--/1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 120-730 M.
Boechera rubicundula Mt. Day rockcress	--/--/1B	Rocky slopes, chaparral. Species may be present in other areas where conditions are favorable. Known from only one occurrence on Mt. Day.
Phacelia phacelioides Mt. Diablo phacelia	--/--/1B.2	Rocky chaparral and rocky cismontane woodland. Possibly threatened by foot traffic and trail construction. 500 – 1,370 M. Blooming Period: April – May
Leptosyne hamiltonii Mt. Hamilton coreopsis	--/--/1B	Cismontane woodland (rocky). Known only from the Mt. Hamilton Range. 550-1,300 M.
Lomatium observatorium Mt. Hamilton lomatium	--/--/1B.2	Cismontane woodland; possibly threatened by fire suppression and non-native plants. 1,219 – 1,330 M. Blooming period: March - May
Cirsium fontinale var. campylon Mt. Hamilton fountain thistle	--/--/1B.2	Serpentinite seeps, chaparral, cismontane woodland, valley and foothill grassland. Threatened by urbanization, trampling, non-native plants, and grazing. 100-890 M.
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	--/--/1B.2	Marshes and swamps (coastal salt).Once rather common in proper habitat; now greatly reduced by development. Also threatened by foot traffic, non-native plants, hydrological alterations, cattle grazing and trampling. 0-10 M.
Navarretia prostrata Prostrate vernal pool navarretia	--/--/1B.2	Mesic. Coastal Scrub, Meadows and Seeps, Valley and Foothill Grassland (alkaline), Vernal Pools.
Chorizanthe robusta var. robusta robust spineflower	FE/--/1B.1	Sandy or gravelly soil in chaparral (maritime), cismontane woodland (openings), coastal dunes, and coastal scrub. Most populations extirpated, and now known from only six extended occurrences. 3-300 M.
Sanicula saxatilis Rock Sanicle	--/--/1B.2	Rocky, scree, talus. Broadleafed upland forest, Chaparral, and Valley and Foothill Grassland. 620-1,175 M.
Trifolium hydrophilum	--/--/1B.2	Marshes and swamps, valley and foothill grassland (mesic,

SPECIES	*STATUS*	*HABITAT*
saline clover		alkaline), vernal pools. 0-300 M.
Collinsia multicolor San Francisco collinsia	--/--/1B.2	Wet (mesic) areas in coast live oak forest and woodland, closed-cone coniferous forest, mixed serpentine chaparral, and northern coastal scrub/Diablan sage scrub. 30-250 M.
Extriplex joaquinana San Joaquin spearscale	--/--/1B.2	Alkaline. Chenopod scrub, Meadows and Seeps, Playas, Valley and foothill grassland. 1-835 M.
Clarkia concinna ssp. automixa Santa Clara red ribbons	--/--/4.3	Chaparral, cismontane woodland. 90-1,500 M.
Dudleya abramsii ssp. setchellii Santa Clara Valley dudleya	--/CE/1B.1	Serpentinite, rocky, cismontane woodland, valley and foothill grassland. Threatened by urbanization, development, vehicles, non-native plants, and grazing. 60-455 M.
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	--/--/1B.1	Occurs in sandy or gravelly, openings. Chaparral and Cismontane woodland. Blooming Period May through August.
Stuckenia filiformis ssp. alpina Slender-leaved pondweed	--/--/2B	Marshes and swamps (assorted shallow freshwater). 200-2,150 M.
Lessingia micradenia var. glabrata smooth lessingia	--/--/1B.2	Occurs on serpentine outcrops and in rocky soils in serpentine bunchgrass grassland elevations of 120-420 meters. Prefers areas with low vegetation cover, sometimes occurring on roadcuts or at roadsides.
Dirca occidentalis western leatherwood	--/--/1B.2	Mesic soils in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest and riparian woodland. Possibly threatened by road and trail maintenance. 25-425 M.
Monolopia gracilens woodland woollythreads	--/--/1B.2	Chaparral, valley and foothill grasslands (serpentine), cismontane woodland, broadleaved upland forests. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns.

SOURCE: CDFW CNDDB 2020

NOTES: STATUS IS SHOWN FOR (FEDERAL/STATE/CNPS). (--) INDICATES NO LISTING STATUS.

ABBREVIATIONS:

FE FEDERAL ENDANGERED

FT FEDERAL THREATENED

CE *CALIFORNIA ENDANGERED*

CT *CALIFORNIA THREATENED*

1A *PLANTS PRESUMED EXTINCT IN CALIFORNIA*

1B.1 *PLANTS RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE; SERIOUSLY THREATENED IN CALIFORNIA*

1B.2 *PLANTS RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE; FAIRLY THREATENED IN CALIFORNIA*

4.2 *PLANTS OF LIMITED DISTRIBUTION; FAIRLY THREATENED IN CALIFORNIA*

4.3 *PLANTS OF LIMITED DISTRIBUTION; NOT VERY THREATENED IN CALIFORNIA*

Special Status Animals

The search revealed documented occurrences of 55 special status animal species within 12-Quad region of Planning Area. This includes: five amphibians, 23 birds, two fish, 10 invertebrates, 11 mammals, and four reptiles. Table 3.4-3 provides a list of the special-status animal species that are documented within the 12-Quad region of the Planning Area, their habitat, and current protective status. Figures 3.4-2 illustrate the special status species located within the 12-Quad region of the Planning Area. Figure 3.4-3 illustrates the special status species located within one mile of Milpitas.

TABLE 3.4-3: SPECIAL STATUS ANIMALS PRESENT OR POTENTIALLY PRESENT

SPECIES	*STATUS*	*HABITAT*
	AMPHIBIANS	
Dicamptodon ensatus California giant salamander	--/--	Larvae of this species usually inhabit clear, cold streams, but are also found in mountain lakes and ponds. Adults are found in humid forests under rocks and logs, for example, near mountain streams or rocky shores of mountain lakes. Eggs are usually laid in the headwaters of mountain streams. Breeding typically occurs in water-filled nest chambers under logs and rocks or in rock crevices.
Rana draytonii California red-legged frog	FT/CT	Requires a variety of habitat elements with aquatic breeding areas embedded within a matrix of riparian and upland dispersal habitats. Breeds in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons.
Ambystoma californiense California tiger salamander	FT/CT (CSC)	Restricted to grasslands and low foothills with pools or ponds. Needs underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.
Rana boylii foothill yellow-legged frog	--/CSC	Occurs from sea level to about 6,000 feet. Prefers gravelly or sandy streams with open banks near woodlands.
Aneides niger Santa Cruz black salamander	--/--	Occurs in mixed deciduous woodland, coniferous forests, coastal grasslands. Found under rocks near streams, in talus, under damp logs, and other objects.
	BIRDS	

SPECIES	*STATUS*	*HABITAT*
Melospiza melodia pusillula Alameda song sparrow	--/--	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.
Falco peregrinus anatum American peregrine falcon	--/--	coastal sage scrub communities that are associated with coastal dunes, perennial grasslands, annual grasslands, croplands, pastures, coastal hardwood forests, coastal woodlands, mixed-chaparral communities.
Haliaeetus leucocephalus Bald eagle	MBTA/CE	Ocean shore, lake margins, rivers, and lower montane coniferous forest. Nest within one mile of water.
Riparia riparia Bank swallow	MBTA/CT	Riparian scrub and woodland. Requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes, ocean to dig nesting holes.
Rynchops niger Black skimmer	--/--	Mostly ocean beaches, tidewater. Favors coastal waters protected from open surf, such as lagoons, estuaries, inlets, sheltered bays. Locally on inland lakes.
Athene cuniculari burrowing owl	--/--	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
Laterallus jamaicensis cotruniculus California black rail	--/CT	Tidal marshes and freshwater marshes in the western United States and Mexico. California black rails inhabit the drier portions of wetlands. The rails select areas with high stem densities and canopy coverage in shallow water; close to upland vegetation California black rails are also associated with plants of the upland/wetland interface, such as seep willow, arrowweed, saltgrass, and cottonwood.
Sternula antillarum browni California least tern	FE/CE	Along the coast. Nest on open beaches kept free of vegetation by the tide.
Rallus obsoletus obsoletus California Ridgway's rail	FE/CE	Found in saltwater marshes, freshwater marshes, and mangrove swamps in California, Arizona, Nevada, and coastal western Mexico. Populations are declining largely due to wetland loss and degradation.
Accipiter cooperii Cooper's hawk	--/--	Breeding habitat occurs in the southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other areas in southern California. Habitats used most frequently include dense stands of live oak, riparian deciduous or other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation.

SPECIES	*STATUS*	*HABITAT*
Aquila chrysaetos Golden eagle	--/--	Found in open and semi-open habitats from sea level to 3600 M. Habitat types include tundra, shrublands, grasslands, woodland-brushlands, and coniferous forests. Most are found in mountainous areas, but they also nest in wetland, riparian, and estuarine habitats.
Ardea herodias great blue heron	--/--	Found throughout much of North America and into Central and South America. Common throughout California. Found in tall trees near a variety of wetland habitat types. Isolated areas that discourage predation and human disturbance are preferred.
Circus hudsonius Northern harrier	--/--	Marshes, fields, prairies. Found in many kinds of open terrain, both wet and dry habitats, where there is good ground cover. Often found in marshes, especially in nesting season, but sometimes will nest in dry open fields.
Falco mexicanus Prairie falcon	--/--	Open hills, plains, prairies, deserts. Typically found in fairly dry open country, including grassland and desert. Also in open country above treeline in high mountains. In winter, often found in farmland and around lakes and reservoirs, and may regularly winter in some western cities. Avoids forested country, and usually scarce on the immediate coast.
Geothlypis trichas sinuosa saltmarsh common yellowthroat	--/--	Resident of the fresh and saltwater marshes in the San Francisco Bay region. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.
Accipiter striatus Sharp-shinned hawk	--/--	Found in pine, fir and aspen forests (among others). They can be found hunting in forest interior and edges from sea level to near alpine areas. Sharp-shinned hawks can also be found near rural, suburban and agricultural areas, where they often hunt at bird feeders. Breeding season: Late March to June.
Egretta thula Snowy egret	--/--	Marshes, swamps, ponds, shores. Widespread in many types of aquatic habitats, including fresh and salt water; in coastal areas, may seek sheltered bays. Inland, favors extensive marshes and other large wetlands. Sometimes forages in dry fields. Nests in colonies in trees, shrubs, mangroves, sometimes on or near the ground in marshes.
Buteo swainsoni Swainson's hawk	FT/--	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. Highest nesting densities occur near Davis and Woodland, Yolo County. Nests in oaks or cottonwoods in or near riparian habitats. Forages in grasslands, irrigated pastures, and grain fields.
Agelaius tricolor tricolored blackbird	--/--	Highly colonial species, most numerous in central valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.

SPECIES	*STATUS*	*HABITAT*
Charadrius alexandrinus nivosus western snowy plover	--/CT	Sandy beaches on marine and estuarine shores and salt pans on Bay saline managed ponds.
Coccyzus americanus occidentalis western yellow-billed cuckoo	FE/CT	Uses a variety of shallow-water habitats. Cottonwood trees are an important foraging habitat in areas where the species has been studied in California. Appears to require large blocks of riparian habitat for nesting.
Elanus leucurus white-tailed kite	--/--	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated dense-topped trees for nesting and perching.
Coturnicops noveboracensis Yellow rail	--/--	Grassy marshes, meadows. In summer, favors large wet meadows or shallow marshes dominated by sedges and grasses. Typically in fresh or brackish marsh with water no more than a foot deep. In winter mostly in coastal salt marsh, especially drier areas with dense stands of spartina; also rice fields, damp meadows near coast.
FISH		
Oncorhynchus mykiss irideus steelhead – central CA Coast DPS	FT/--	Free of heavy sedimentation with adequate flow and cool, clear water. Gravel that is between 0.5 to 6.0 inches in diameter, dominated by 2 to 3 inch gravel. Escape cover such as logs, undercut banks, and deep pools for spawning adults.
Spirinchus thaleichthys Longfin smelt	FC/--	Prior to spawning, these fish aggregate in deepwater habitats available in the northern Delta, including, primarily, the channel habitats of Suisun Bay and the Sacramento River. Spawning occurs in fresh water on the San Joaquin River below Medford Island and on the Sacramento River below Rio Vista.
INVERTEBRATES		
Euphydryas editha bayensis Bay checkerspot butterfly	--/CT	Requires serpentine soils for food source. Found from the San Francisco Bay area to San Mateo and Santa Clara counties.
Linderiella occidentalis California linderiella	--/--	Ranges from near Redding in the north to as far south as Fresno County. Natural, and artificial, seasonally ponded habitat types including: vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities
Bombus crotchii crotch bumble bee	--/CC	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.

SPECIES	*STATUS*	*HABITAT*
Tryonia imitator California brackish water snail	--/--	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County.
Microcina homi Hom's micro-blind harvestman	--/--	Closely associated with serpentine rocks and soils in moist situations. Found under moist rocks in hilly grassland areas that have had little recent disturbance and are not subject to flooding.
Danaus plexippus Monarch Butterfly – California overwintering population	--/--	Breeding areas are virtually all patches of milkweed in North America. North American populations is the overwintering habitats, which are certain high altitude Mexican conifer forests or coastal California conifer or Eucalyptus groves.
Bombus caliginosus obscure bumble bee	--/--	Inhabits open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests. Males patrol circuits in search of mates. Food plants include Ceanothus, Cirsium, Clarkia, Keckiella, Lathyrus, Lotus, Lupinus, Rhododendron, Rubus, Trifolium, and Vaccinium.
Adela oplerella Opler's longhorn moth	--/--	Shallow, serpertine-derived soils which support dwarf plantain (*Plantego erecta*) grasslands. Larvae feed on California cream cups.
Lepidurus packardi Vernal pool tadpole shrimp	FE/--	Vernal pools and ephemeral stock ponds.
Bombus occidentalis western bumble bee	--/CC	Historically from the Pacific coast to the Colorado Rocky Mountains; severe population decline west of the Sierra-Cascade Crest. Generalist foragers; have been reported visiting a wide variety of flowering plants. Require plants that bloom and provide adequate nectar and pollen from early February to late November.
MAMMALS		
Taxidea taxus American badger	--/--	Badgers occur in a wide variety of open, arid habitats but are most commonly associated with grasslands, savannas, mountain meadows, and open areas of desert scrub; the principal habitat requirements for the species appear to be sufficient food (burrowing rodents), friable soils, and relatively open, uncultivated ground.
Dipodomys heermanni berkeleyensis Berkeley kangaroo rat	--/--	Occurs in a variety of habitat. Prefer the plains of the central California coast, sandy valley bottoms, and hilly knolls with shall soils. Habitat extends from the foothills of the Sierra Nevada to the interior and coastal valets. Limited to elevations below 3,000 M.
Lasiurus cinereus hoary bat	--/--	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage or medium to large trees. Feeds primarily on moths. Requires open water source.

SPECIES	*STATUS*	*HABITAT*
Myotis evotis long-eared myotis	--/--	Most commonly found in mixed coniferous forests, from humid coastal areas to montane forests. Prefers to roost in tree cavities in dense forests but have been found to roost in the stumps of clear-cut stands or in crevices of sandstone boulders.
Antrozous pallidus pallid bat	--/--	Occurs in a variety of habitats from desert to coniferous forest. Most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California. Relies heavily on trees for roosts.
Reithrodontomys raviventris salt-marsh harvest mouse	FE/CE	Only in saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.
Sorex vagrans halicoetes salt-marsh wandering shrew	--/--	Confined to the medium to high salt marshes of the South San Francisco Bay. Common habitat locations are characterized by plentiful amounts of driftwood among pickleweed. Threatened by habitat loss and fragmentation.
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	--/--	Grasslands, scrub and wooded areas. Evergreen or live oaks and other thick-leaved trees and shrubs are important habitat components.
Dipodomys venustus venustus Santa Cruz kangaroo rat	--/--	Requires well-drained, deep soils and is often found on slopes where chaparral, or chaparral mixed with oak or pine, grow. Relies on the seeds of annual plants as their sole food source.
Corynorhinus townsendii Townsend's big-eared bat	FC/--	Hibernates in colonies that favor open roosting areas such as ceilings, walls, or well-ventilated sections of caves or mines. Forages over open rangeland or wooded canopies.
Myotis yumanensis Yuma myotis	--/--	Distribution is closely tied to bodies of water, which it uses as foraging sites and sources of drinking water. Open forests and woodlands are optimal habitat. Roosts in buildings, mines, caves, or crevices. Has also been reported roosting in abandoned swallow nests and under bridges.
REPTILES		
Masticophis lateralis euryxanthus Alameda whipsnake	FT/CT	Typically found in chaparral—northern coastal sage scrub and coastal sage. Recent telemetry data indicate that, although home ranges of Alameda whipsnakes are centered on shrub communities, they venture up to 500 feet into adjacent habitats, including grassland, oak savanna, and occasionally oak-bay woodland.
Phrynosoma blainvillii	--/--	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for

SPECIES	*STATUS*	*HABITAT*
Coast horned lizard		sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.
Anniella pulchra Northern California legless lizard	--/--	This lizard is common in suitable habitats in the Coast Ranges from Contra Costa County south to the Mexican border. Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.
Emys marmorata Western pond turtle	--/--	Requires both aquatic and terrestrial habitats. Uses permanent and seasonal aquatic habitats including rivers, sloughs, lakes, reservoirs, ponds, and irrigation canals. Nesting typically occurs within 200 M of aquatic habitat in areas with compact soil, sparse vegetation, and good solar exposure.

SOURCE: CDFW CNDDB 2020

NOTES: STATUS IS SHOWN FOR (FEDERAL/STATE). (--) INDICATES NO LISTING STATUS.
ABBREVIATIONS:
FE FEDERAL ENDANGERED
FT FEDERAL THREATENED
FC FEDERAL CANDIDATE
CE CALIFORNIA ENDANGERED
CT CALIFORNIA THREATENED
CC CALIFORNIA ENDANGERED CANDIDATE

Sensitive Natural Communities

The California Department of Fish and Wildlife (CDFW) considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDB search revealed three sensitive natural communities within the 12-Quad region of the Planning Area. These include Northern Coastal Salt Marsh, Sycamore Alluvial Woodland, and Serpentine Bunchgrass. Northern Coastal Salt Marshes occur along margins of the Bay that are sheltered from excessive wave action. They support a high amount of vegetation such as cordgrass, pickleweed, eelgrass (*Zostera marina*) and saltgrass (*Distichlis spicata*), as well as potential habitat for a plant of special concern, the Point Reyes bird's-beak (*Cordylanthus maritimus* ssp. *palustris*). Sycamore Alluvial Woodland is generally present on broad floodplains and terraces along low gradient streams with deep alluvium. Areas mapped as sycamore alluvial woodland are generally open canopy woodlands dominated by California sycamore (*Platanus racemosa*), often with white alder and willows (*Salix* spp.). Other associated species include bigleaf maple, valley oak, coast live oak, and California bay. The Serpentine Bunchgrass is known to occur southeast of San Jose near Coyote Creek. Serpentine grasslands are highly infertile because of their extremely high levels of magnesium, chromium, and nickel, low concentrations of nutrients such as calcium and nitrogen, and low waterholding capacity. Serpentine grasslands support high-quality native plant communities, including rare plants such as the federally listed Santa Clara Valley dudleya and Metcalf Canyon jewel-flower. Several invertebrate species, including the federally threatened Bay checkerspot butterfly, also depend on serpentine grasslands because their host food plants are found primarily in these habitats.

Of these three sensitive natural communities documented within the 12-Quad region of the Planning Area, the Northern Coastal Salt Marsh is located within one mile of the Milpitas city limits. As shown in Figure 3.4-3, the Northern Coastal Salt Marsh area is located west of Interstate 880, outside of the City limits and SOI. Figure 3.4-2 illustrates the location of each sensitive natural community.

3.4.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the natural resources of the State and nation including the CDFW, the USFWS, the USACE, and the National Marine Fisheries Service (NMFS). These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the Federal, State, and local regulations that are applicable to implementing the General Plan.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act, passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed it is fully protected from a "take" unless a take permit is issued by the United States Fish and Wildlife Service. A take is defined as the harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct, including modification of its habitat (16 USC 1532, 50 CFR 17.3). Proposed endangered or threatened species are those species for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Migratory Bird Treaty Act

To kill, posses, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., §703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC Section 668) protects these birds from direct take and prohibits the take or commerce of any part of these species. The USFWS administers the act, and reviews Federal agency actions that may affect these species.

Clean Water Act – Section 404

Section 404 of the Clean Water Act (CWA) regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the 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; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §323.2(f)].

Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows [33 C.F.R. §328.3(a)]. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

The USACE is the agency responsible for administering the permit process for activities that affect waters of the U.S. Executive Order 11990 is a Federal implementation policy, which is intended to result in no net loss of wetlands.

Clean Water Act – Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board. To obtain the water quality certification, the Regional Water Quality Control Board must indicate that the proposed fill would be consistent with the standards set forth by the State.

Department of Transportation Act - Section 4(f)

Section 4(f) has been part of Federal law since 1966. It was enacted as Section 4(f) of the Department of Transportation (DOT) Act of 1966 and set forth in Title 49 United States Code (U.S.C.), Section 1653(f). In January 1983, as part of an overall recodification of the DOT Act, Section 4(f) was amended and codified in 49 U.S.C. Section 303. This law established policy on Lands, Wildlife and Waterfowl Refuges, and Historic Sites as follows:

> *It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities. The Secretary of Transportation may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of a historic site of national, State, or local significance (as determined*

by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if: a) There is no prudent and feasible alternative to using that land; and b) The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. The Act requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

STATE

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Endangered Species Act (CESA) protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

CESA was expanded upon the original Native Plant Protection Act and enhanced legal protection for plants. To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §1900-1913 California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the State. The intent of the law was to preserve, protect, and enhance endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code §3503, 3503.5, 3800 - Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called “raptors,” are protected. The law indicates that it is unlawful to take, posses, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code §1601-1603 – Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a "Streambed Alteration Agreement" from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Public Resources Code § 21000 - California Environmental Quality Act

CEQA identifies that a species that is not listed on the Federal or State endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e., candidate or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere. List 3 contains plants where additional information is needed. List 4 contains plants with a limited distribution.

Public Resources Code § 21083.4 - Oak Woodlands Conservation

In 2004, the California legislature enacted SB 1334, which added oak woodland conservation regulations to the Public Resources Code. This new law requires a county to determine whether a project, within its jurisdiction, may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county must require oak woodland mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. Such mitigation alternatives include: conservation through the use of conservation easements; planting and maintaining an appropriate number of replacement trees; contribution of funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements; and/or other mitigation measures developed by the county.

California Oak Woodland Conservation Act

The California Legislature passed Assembly Bill 242, known as the California Oak Woodland Conservation Act, in 2001 as a result of widespread changes in land use patterns across the

landscape that were fragmenting oak woodland character over extensive areas. The Act created the California Oak Woodland Conservation Program within the Wildlife Conservation Board. The legislation provides funding and incentives to ensure the future viability of California's oak woodland resources by maintaining large scale land holdings or smaller multiple holdings that are not divided into fragmented, nonfunctioning biological units. The Act acknowledged that the conservation of oak woodlands enhances the natural scenic beauty for residents and visitors, increases real property values, promotes ecological balance, provides habitat for over 300 wildlife species, moderates temperature extremes, reduces soil erosion, sustains water quality, and aids with nutrient cycling, all of which affect and improve the health, safety, and general welfare of the residents of the State.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy." The goals of the policy are to establish a framework and strategy that will:

- Ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- Reduce procedural complexity in the administration of State and Federal wetland conservation programs.
- Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration.

The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act provides long-term protection of species and habitats through regional, multi-species planning before the special measures of the CESA become necessary.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to regulate state water quality and protect beneficial uses.

San Francisco Bay Basin (Region 2) Water Quality Control Plan

The San Francisco Bay Region (Region) is 4,603 square miles, roughly the size of the State of Connecticut, and characterized by its dominant feature, 1,100 square miles of the 1,600 square mile San Francisco Bay Estuary (Estuary), the largest estuary on the west coast of the United States, where fresh waters from California's Central Valley mix with the saline waters of the Pacific Ocean. The Region also includes coastal portions of Marin and San Mateo counties, from Tomales Bay in the north to Pescadero and Butano Creeks in the south.

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

City of Milpitas Municipal Code

Title X, Chapter 2 (Tree Maintenance and Protection Ordinance of the City of Milpitas) of the City of Milpitas Municipal Code (Code) is to establish policies, regulations, and standards to protect and to preserve, when feasible, all trees and plantings on City property, and all protected plantings of significant size, age, and/or benefit to the community at large. The City recognizes substantial economic, environmental and aesthetic importance of the trees and plantings within the community. This Chapter of the Code is part of a comprehensive plan developed in the best interest of the Milpitas community to regulate the planting and maintenance of trees and Other Plantings in or adjacent to streets and within easements, in rights-of-way and other public places within the City and where appropriate, private property, to provide for orderly development and protection of public facilities, and to regulate the removal of trees that contribute significantly to the value of land, preservation of resources, and quality of life in the City of Milpitas. Chapter X-4.02 of the Code requires persons to obtain an approved permit from the City of Milpitas Planning Department to remove any street tree, protected tree or heritage planting on private property.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on biological resources if it will:

- 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 Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

IMPACTS AND MITIGATION

Impact 3.4-1: General Plan implementation could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

Approval of the General Plan would not directly approve or entitle any development or infrastructure projects. However, implementation of the General Plan and Land Use Map would allow and facilitate future development in Milpitas, which could result in adverse impacts to special-status plant and wildlife species, as well as sensitive natural habitat or wildlife movement corridors.

SPECIAL STATUS PLANT SPECIES

The CNDDB search revealed documented occurrences of 42 special status plant species within the 12-quad search area. Table 3.4-2 provides a list of special-status plant species that are documented within a 12-quad search area of Milpitas, and current protective status. Figure 3.4-2 illustrates the special status species located within the 12-quad search area.

Subsequent development under the proposed General Plan could result in the direct loss of habitat areas associated with these special status plant species, since suitable habitat for these species does occur in the region. Additionally, indirect impacts to special status plant species could occur with implementation of the General Plan. Indirect impacts could include habitat degradation as a result of impacts to water quality.

Special status plant species receive protection from various Federal and State laws and regulations, including FESA and CESA. These regulations generally prohibit the taking of the plant species without a special permit. Additionally, the proposed General Plan includes numerous policies and actions intended to reduce or avoid impacts to special status plant species. These policies and actions are listed below.

SPECIAL STATUS ANIMAL SPECIES

The search revealed documented occurrences of 55 special status animal species within 12-Quad region of Planning Area. This includes: five amphibians, 23 birds, two fish, 10 invertebrates, 11 mammals, and four reptiles. Table 3.4-3 provides a list of the special-status animal species that are documented within the 12-Quad region of the Planning Area, their habitat, and current protective status. Figures 3.4-2 illustrate the special status species located within the 12-Quad region of the Planning Area. 16 species are located within one mile of Milpitas. Table 3.4-3 provides a list of the special-status animal species that are documented within the 12-quad search area, and current protective status. Figure 3.4-2 illustrates the special status species located within the 12-quad search area.

While most new development in Milpitas that would occur under the proposed General Plan would occur in areas that have been previously developed, subsequent development under the proposed General Plan could result in the direct loss of habitat areas associated with these special status animal species, since suitable habitat for these species does occur in the region, and may occur on future development project sites within Milpitas. Additionally, indirect impacts to special status animal species could occur with implementation of the General Plan. Indirect impacts could include habitat degradation as a result of impacts to water quality, increased human presence, and the loss of foraging habitat.

Special status animal species receive protection from various Federal and State laws and regulations, including FESA and CESA. These regulations generally prohibit the taking of a species or direct impact to foraging and breeding habitat without a special permit. Additionally, the proposed General Plan includes numerous policies and actions intended to reduce or avoid impacts to special status animal species. These policies and actions are listed below.

CONCLUSION

Construction and maintenance activities associated with future development projects under the proposed General Plan could result in the direct and indirect loss or indirect disturbance of special status plant or animal species or their habitats that are known to occur, or have potential to occur, in the region. Impacts to special status species or their habitat could result in a substantial reduction in local population size, lowered reproductive success, or habitat fragmentation. Impacts on special status species associated with individual subsequent projects could include:

- increased mortality caused by higher numbers of automobiles in new areas of development;
- direct mortality from the collapse of underground burrows, resulting from soil compaction;

- direct mortality resulting from the movement of equipment and vehicles through construction areas;
- direct mortality resulting from removal of trees with active nests;
- direct mortality or loss of suitable habitat resulting from the trimming or removal of obligate host plants;
- direct mortality resulting from fill of wetlands features;
- loss of breeding and foraging habitat resulting from the filling of seasonal or perennial wetlands;
- loss of breeding, foraging, and refuge habitat resulting from the permanent removal of riparian vegetation;
- loss of suitable habitat for vernal pool invertebrates resulting from the destruction or degradation of vernal pools or seasonal wetlands;
- abandoned eggs or young and subsequent nest failure for special status nesting birds, including raptors, and other non-special status migratory birds resulting from construction-related noises;
- loss or disturbance of rookeries and other colonial nests;
- loss of suitable foraging habitat for special status raptor species;
- loss of migration corridors resulting from the construction of permanent structures or features; and
- impacts to fisheries/species associated with waterways.

However, implementation of the policies and actions listed below would assist in minimizing the impact to a less than significant level. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of special status plants and animals, including habitat. The City of Milpitas has prepared the General Plan to include numerous policies and actions intended to protect special status plants and animals, including habitat, from adverse effects associated with future development and improvement projects.

While future development has the potential to result in impacts to protected special status plants and animals, including habitat, the implementation of the policies and action listed below, as well as Federal and State regulations, would result in a **less than significant** impact to special status plants and animals, including habitat.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON-2.1: Conserve existing native trees and vegetation where possible and integrate regionally native trees and plant species into development and infrastructure projects where appropriate.

Policy CON-2.3: Avoid removal of large, mature trees that provide wildlife habitat, visual screening, or contribute to the visual quality of the environment through appropriate project design and building siting. If full avoidance is not possible, prioritize planting of replacement trees on-site over

off-site locations. Replacement trees for high-quality mature trees should generally be of like kind, and provide for comparable habitat functionality, where appropriate site conditions exist.

Policy CON-3.1: Preserve and enhance biological communities that contribute to Milpitas' and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

Policy CON-3.2: Preserve and enhance the aesthetic and habitat value of riparian corridors including, but not limited to Coyote, Berryessa and Penitencia Creeks.

Policy CON-3.4: Focus conservation efforts on areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

Policy CON-3.5: Work with the Santa Clara Valley Water District to preserve wetlands, riparian corridors, and buffer zones in Milpitas by continuing to require that new development follow the "Guidelines and Standards for Land Use Near Streams" to protect streams and riparian habitats. Encourage the use of Green Stormwater Infrastructure such as water quality wetlands, bioretention swales, watershed-scale retrofits, and other low-impact development techniques, etc., consistent with the City's Green Stormwater Infrastructure Plan and where such measures are likely to be effective and technically and economically feasible.

Policy CON-3.7: Build upon existing streetscapes and develop an urban forest along the City's major corridors and in residential neighborhoods to provide avian habitat, sequester carbon emissions, foster pedestrian activity, and provide shade.

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON-2a: Consider the preparation and adoption of an Urban Forest Management Plan (UFMP) for Milpitas. The UFMP should address the following:

- *Develop an Urban Forest Vision for Milpitas;*
- *Inventory and assess existing resources and programs;*
- *Analyze data and identify issues and trends over time;*
- *Prioritize needs and opportunities;*
- *Identify goals, objectives, and implementation actions;*
- *Identify funding mechanisms and implementation responsibilities; and*
- *Create and implement a monitoring plan.*

Action CON-2b: Update Milpitas' Tree Protection Regulations (Municipal Code Title X, Chapter 2) to:

1. *Establish additional criteria and findings that need to be met prior to removing a protected or heritage tree.*
2. *Provide more detailed tree replacement requirements to address the aesthetic loss, habitat value, and economic value of the tree being removed. In instances where tree replacement isn't desired or feasible, the code should create additional criteria that include findings of infeasibility, and additional standards such as in-lieu fee programs, and off site mitigation options to minimize impacts when onsite tree replacement has been found infeasible;*
3. *Enhance the penalties for unpermitted tree removals;*

4. *Consider adding additional tree species to the list of locally protected tree species (particularly native species); and*
5. *Establish criteria for construction practices to protect existing high value trees to the greatest extent feasible. Criteria may include requirements for the installation of barrier fencing around the drip line, limitations to the area of ground disturbance around protected trees, and other measures deemed appropriate and feasible.*

Action CON-2f: Make available a list of plants and trees native to the region that are suitable for use in landscaping, consistent with the requirements of Milpitas' Water Efficient Landscape Ordinance (WELO). The plant and tree species should be drought tolerant, and consideration should be given to the suitability of the plant and tree species for use as habitat to native animals, birds, and insects. The list should be provided online in a user-friendly format, and added to the City's Landscape requirements contained in Title XIII, Chapter 5 – of Milpitas' Municipal Code. Staff should direct project applicants to the list during site design review and approval.

Action CON-3a: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Santa Clara Valley Habitat Plan to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.

Action CON-3b: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

Action CON-3c: Encourage the Santa Clara Valley Water District, County Parks Department, developers and private property owners to plant and maintain native trees and plants and replace invasive, non-native species with native ones along creek corridors.

Action CON-3g: Encourage the Santa Clara Valley Water District, County Parks Department, developers and private property owners to plant and maintain native trees and plants and replace invasive, non-native species with native ones along creek corridors.

Action CON-3h: Continue to collaborate with the Santa Clara Valley Water District, and pursue grant funding from the district to support the priorities and projects of the Safe, Clean Water and Natural Flood Protection Program.

Action CON-3j: Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara Valley Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Milpitas and to develop riparian management guidelines to be

implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

Action CON-3l: Provide a conservation page (or similar page) on the City's website that provides links to resource agencies (i.e., CDFW, USFWS, USACE, etc.) and provides information regarding local and regional conservation and environmental programs, to the extent that the City has readily available information.

Impact 3.4-2: General Plan implementation could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDB search revealed three sensitive natural communities within the twelve quad search area. The sensitive natural communities within the twelve quad search area include the aquatic communities of the Northern Coastal Salt Marsh and Sycamore Alluvial Woodland, as well as the terrestrial community of Serpentine Bunchgrass grassland. All three of these community types were once more widely distributed throughout California, but have been modified or destroyed by grazing, cultivation, and urban development. Since the remaining examples of these sensitive natural communities are under continuing threat from future development, CDFW considers them "highest inventory priorities" for future conservation. Of these three sensitive natural communities documented within the 12-quad region of the Planning Area, the Northern Coastal Salt Marsh is within one mile. The Northern Coastal Salt Marsh area is located west of Interstate 880, outside of the City limits and SOI.

While not always documented as a sensitive natural community in the CNDDB, streams, rivers, wet meadows, and vernal pools are of high concern because they provide unique aquatic habitat for many endemic species, including special status plants, birds, invertebrates, and amphibians. The City of Milpitas contains numerous aquatic habitats that qualify as sensitive habitat. The following aquatic resources are found in the Planning Area: Arroyo de los Coches Creek, Berryessa Creek, Coyote Creek; Calera Creek; Ford Creek; Lower Penitencia Creek; Piedmont Creek; Wrigley Creek; Wrigley-Ford Creek; and Tularcitos Creek. Additionally, as shown on Figure 3.4-1, the Wildlife Habitat Relationship Type for land within the City limits adjacent to Coyote Creek and land within the SOI area adjacent to portions of Clara Creek, Scott Creek, and Arroyo de Loches is designated Valley Foothill Riparian.

The proposed project is a planning document that does not itself approve any specific physical changes to the to the environment, adoption of the proposed project would not directly impact the environment. However, the project could have an indirect change on the physical environment through subsequently approved projects that are consistent with the buildout that is contemplated in the General Plan. The implementation of an individual project would require a

detailed and site-specific review of the site to determine the presence or absence of riparian habitat or natural sensitive communities. If riparian habitat or natural sensitive communities are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process.

This potential impact would be minimized through the implementation of the policies and actions listed below. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of sensitive natural communities, including riparian habitat. The City of Milpitas has prepared the General Plan to include numerous policies and actions intended to protect sensitive natural communities, including riparian habitat, from adverse effects associated with future development and improvement projects. While future development has the potential to result in impacts to protected habitats, the implementation of the General Plan policies and action listed below, as well as Federal and State regulations, would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON-3.1: Preserve and enhance biological communities that contribute to Milpitas' and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

Policy CON-3.2: Preserve and enhance the aesthetic and habitat value of riparian corridors including, but not limited to Coyote, Berryessa and Penitencia Creeks.

Policy CON-3.3: Limit the disturbance of natural water bodies and drainage systems in Milpitas by conserving natural open space areas, protecting channels, and minimizing the impacts and pollutants from stormwater and urban runoff.

Policy CON-3.4: Focus conservation efforts on areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

Policy CON-3.5: Work with the Santa Clara Valley Water District to preserve wetlands, riparian corridors, and buffer zones in Milpitas by continuing to require that new development follow the "Guidelines and Standards for Land Use Near Streams" to protect streams and riparian habitats. Encourage the use of Green Stormwater Infrastructure such as water quality wetlands, bioretention swales, watershed-scale retrofits, and other low-impact development techniques, etc., consistent with the City's Green Stormwater Infrastructure Plan and where such measures are likely to be effective and technically and economically feasible.

Policy CON-3.6: Work cooperatively with local, state, and federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP).

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON-3a: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Santa Clara Valley Habitat Plan to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.

Action CON-3b: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

Action CON-3c: Cooperate with State, federal and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the "Guidelines and Standards for Land Use Near Streams" from the Santa Clara Valley Water District and Title XI, Chapter 15 (Floodplain Management Regulations) of the Milpitas Municipal Code.

Action CON-3e: Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP) and the Municipal Regional Stormwater Permit as issued by the San Francisco Bay Regional Water Quality Control Board.

Action CON-3f: Work with the Santa Clara Valley Water District to restrict future fencing, piping and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

Action CON-3h: Continue to work collaboratively with the Santa Clara Valley Water District to institute on-going programs to remove invasive plant species and harmful insects from sensitive habitat areas, primarily by means other than application of herbicides and pesticides.

Action CON-3i: Continue to collaborate with the Santa Clara Valley Water District, and pursue grant funding from the district to support the priorities and projects of the Safe, Clean Water and Natural Flood Protection Program.

Action CON-3j: Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara Valley Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Milpitas and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and

other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat

Impact 3.4-3: General Plan implementation could 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 (Less than Significant)

Streams, rivers, wet meadows, and vernal pools (wetlands and jurisdictional waters) are of high concern because they provide unique aquatic habitat (perennial and ephemeral) for many endemic species, including special status plants, birds, invertebrates, and amphibians. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the CWA.

Milpitas contains numerous aquatic habitats that qualify as Federally protected wetlands and jurisdictional waters. As noted in Impact 3.4-2, the following aquatic resources are found in the Planning Area: Arroyo de los Coches Creek, Berryessa Creek, Coyote Creek; Calera Creek; Ford Creek; Lower Penitencia Creek; Piedmont Creek; Wrigley Creek; Wrigley-Ford Creek; and Tularcitos Creek. As shown on Figure 3.4-1, wetlands are only found in the northwest corner of the Planning Area adjacent to Coyoto Creek and adjacent to Interstate 880 north of Penitencia Creek. Additionally, the majority of land adjacent to waterways within the City limits is designated Urban or Annual Grassland while the majority land adjacent to waterways outside of the City limits but within the SOI boundary is designated Annual Grassland, Valley Foothill Riparian, Valley Oak Woodland, Coastal Oak Woodland, and Montane Hardwood.

Section 404 of the CWA requires any project that involves disturbance to a wetland or water of the U.S. to obtain a permit that authorizes the disturbance. If a wetland or jurisdictional water is determined to be present, then a permit must be obtained from the USACE to authorize a disturbance to the wetland. Although subsequent projects may disturb protected wetlands and/or jurisdictional waters, the regulatory process that is established through Section 404 of the CWA ensures that there is “no net loss” of wetlands or jurisdictional waters. If, through the design process, it is determined that a future development project cannot avoid a wetland or jurisdictional water, then the USACE would require that there be an equal amount of wetland created elsewhere to mitigate any loss of wetland.

Construction activities associated with individual future projects could result in the disturbance or loss of waters of the United States. This includes perennial and intermittent drainages; unnamed drainages; vernal pools; freshwater marshes; and other types of seasonal and perennial wetland communities. Wetlands and other waters of the United States could be affected through direct removal, filling, hydrological interruption (including dewatering), alteration of bed and bank, and other construction-related activities.

The proposed project is a planning document that does not itself approve any specific physical changes to the to the environment, adoption of the proposed project would not directly impact

the environment. However, the project could have an indirect change on the physical environment through subsequently approved projects that are consistent with the buildout that is contemplated in the General Plan. The implementation of an individual project would require a detailed and site-specific review of the site to determine the presence or absence of water features. If water features are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process.

Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of sensitive natural communities, including protected wetlands. The City of Milpitas has prepared the General Plan to include numerous policies and actions intended to protect wetlands and waters of the U.S. from adverse effects associated with future development and improvement projects. While future development has the potential to result in impacts to protected water features, the implementation of the General Plan policies and actions listed below, as well as Federal and State regulations, would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON-3.1: Preserve and enhance biological communities that contribute to Milpitas' and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

Policy CON-3.2: Preserve and enhance the aesthetic and habitat value of riparian corridors including, but not limited to Coyote, Berryessa and Penitencia Creeks.

Policy CON-3.3: Limit the disturbance of natural water bodies and drainage systems in Milpitas by conserving natural open space areas, protecting channels, and minimizing the impacts and pollutants from stormwater and urban runoff.

Policy CON-3.4: Focus conservation efforts on areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

Policy CON-3.5: Work with the Santa Clara Valley Water District to preserve wetlands, riparian corridors, and buffer zones in Milpitas by continuing to require that new development follow the "Guidelines and Standards for Land Use Near Streams" to protect streams and riparian habitats. Encourage the use of Green Stormwater Infrastructure such as water quality wetlands, bioretention swales, watershed-scale retrofits, and other low-impact development techniques, etc., consistent with the City's Green Stormwater Infrastructure Plan and where such measures are likely to be effective and technically and economically feasible.

Policy CON-3.6: Work cooperatively with local, state, and federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP).

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON-3a: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Santa Clara Valley Habitat Plan to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.

Action CON-3b: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

Action CON-3c: Cooperate with State, federal and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the "Guidelines and Standards for Land Use Near Streams" from the Santa Clara Valley Water District and Title XI, Chapter 15 (Floodplain Management Regulations) of the Milpitas Municipal Code.

Action CON-3e: Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP) and the Municipal Regional Stormwater Permit as issued by the San Francisco Bay Regional Water Quality Control Board.

Action CON-3f: Work with the Santa Clara Valley Water District to restrict future fencing, piping and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

Action CON-3h: Continue to work collaboratively with the Santa Clara Valley Water District to institute on-going programs to remove invasive plant species and harmful insects from sensitive habitat areas, primarily by means other than application of herbicides and pesticides.

Action CON-3i: Continue to collaborate with the Santa Clara Valley Water District, and pursue grant funding from the district to support the priorities and projects of the Safe, Clean Water and Natural Flood Protection Program.

Action CON-3j: Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara Valley Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Milpitas and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and

other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat.

Action CON-3k: Encourage volunteer-based programs that organize community creek restoration and/or clean-up events and provide public education regarding the benefits of city and regional water resources.

Action CON-3l: Provide a conservation page (or similar page) on the City's website that provides links to resource agencies (i.e., CDFW, USFWS, USACE, etc.) and provides information regarding local and regional conservation and environmental programs, to the extent that the City has readily available information.

Impact 3.4-4: General Plan implementation would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (Less than Significant)

Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (i.e., linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). Wildlife habitat corridors maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation or removal. The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

Species utilize movement corridors in several ways. "Passage species" are those species that use corridors as thru-ways between outlying habitats. The habitat requirements for passage species are generally less than those for corridor dwellers. Passage species use corridors for brief durations, such as for seasonal migrations or movement within a home range. As such, movement corridors do not necessarily have to meet any of the habitat requirements necessary for a passage species everyday survival. "Corridor dwellers" are those species that have limited dispersal capabilities – a category that includes most plants, insects, reptiles, amphibians, small mammals, and birds – and use corridors for a greater length of time.

Milpitas contains numerous aquatic habitats that may be used for movement of wildlife. As noted in Impact 3.4-2, the following aquatic resources are found in the Planning Area: Arroyo de los Coches Creek, Berryessa Creek, Coyote Creek; Calera Creek; Ford Creek; Lower Penitencia Creek; Piedmont Creek; Wrigley Creek; Wrigley-Ford Creek; and Tularcitos Creek. The areas of land next to waterways within the Milpitas City Limits is designated for urban uses by the proposed Land Use Map and are generally developed with urban uses currently. Therefore, while flowing through City Limits, the creeks do not function as important movement corridor for native wildlife. The exception to this is Coyote Creek, which is surrounded by all open space, and Penitencia and

Berryessa Creeks, which are surrounded by a mixture of open space/parks and urbanized land uses. It should be noted that Arroyo de Los Coches and Calera Creek both start outside of the City limits within the SOI boundary. While outside of the City limits, the land adjacent to these waterways is either vacant land or agriculture.

As shown in the proposed General Plan Land Use Map, Milpitas has proposed a Permanent Open Space (POS) land use for land adjacent to existing waterways. For example, the land to the east of Coyote Creek in Milpitas is all designated POS to allow the area to be continued to be used by wildlife as a movement corridor. The proposed General Plan Land Use Map also designates the majority of land to the west of Berryessa Creek POS and stretches of land adjacent to Penitencia Creek as POS. Additionally, stretches of land adjacent to Calera Creek and Arroyo de los Coches in the SOI boundary are also designated POS to allow the area to be used by wildlife as movement corridors.

Because the proposed project is a planning document and thus, no physical changes will occur to the environment, adoption of the proposed project would not directly impact the environment. There is a reasonable chance that movement corridors could be impacted throughout the buildout of subsequent individual projects. The implementation of an individual project would require a detailed and site-specific review of the site to determine the presence or absence of movement corridors on a given project site. If movement corridors are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process.

Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of movement corridors. The City of Milpitas has prepared the General Plan to include three policies and one action intended to protect movement corridors from adverse effects associated with future development and improvement projects. While future development has the potential to result in impacts to protected movement corridors, the implementation of the General Plan policies and action listed below, as well as Federal and State regulations, would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON-3.1: Preserve and enhance biological communities that contribute to Milpitas' and the region's biodiversity including, but not limited to, wetlands, riparian areas, and aquatic habitat.

Policy CON-3.2: Preserve and enhance the aesthetic and habitat value of riparian corridors including, but not limited to Coyote, Berryessa and Penitencia Creeks.

Policy CON-3.3: Limit the disturbance of natural water bodies and drainage systems in Milpitas by conserving natural open space areas, protecting channels, and minimizing the impacts and pollutants from stormwater and urban runoff.

Policy CON-3.4: Focus conservation efforts on areas that contain suitable habitat for endangered, threatened, migratory, or special-status species and that can be managed with minimal interference with nearby urban land uses.

Policy CON-3.5: Work with the Santa Clara Valley Water District to preserve wetlands, riparian corridors, and buffer zones in Milpitas by continuing to require that new development follow the "Guidelines and Standards for Land Use Near Streams" to protect streams and riparian habitats. Encourage the use of Green Stormwater Infrastructure such as water quality wetlands, bioretention swales, watershed-scale retrofits, and other low-impact development techniques, etc., consistent with the City's Green Stormwater Infrastructure Plan and where such measures are likely to be effective and technically and economically feasible.

Policy CON-3.6: Work cooperatively with local, state, and federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP).

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON-3a: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Santa Clara Valley Habitat Plan to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.

Action CON-3b: Where sensitive biological habitats have been identified on or immediately adjacent to a project site, the project shall include appropriate mitigation measures identified by a qualified biologist, which may include, but are not limited to the following:

- *Pre-construction surveys for species listed under the State or Federal Endangered Species Acts, or species identified as special-status by the resource agencies, shall be conducted by a qualified biologist;*
- *Construction barrier fencing shall be installed around sensitive resources and areas identified for avoidance or protection, and to reduce potential soil compaction in sensitive areas; and*
- *Pre-Construction training of contractors and sub-contractors shall be conducted by a qualified biologist to identify and avoid protected species and habitat.*

Action CON-3c: Cooperate with State, federal and local agencies to ensure that development does not cause significant adverse impacts to existing riparian corridors; this includes continued compliance with the "Guidelines and Standards for Land Use Near Streams" from the Santa Clara Valley Water District and Title XI, Chapter 15 (Floodplain Management Regulations) of the Milpitas Municipal Code.

Action CON-3e: Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP) and the Municipal Regional Stormwater Permit as issued by the San Francisco Bay Regional Water Quality Control Board.

Action CON-3f: Work with the Santa Clara Valley Water District to restrict future fencing, piping and channelization of creeks when flood control and public safety can be achieved through measures that preserve the natural environmental and habitat of riparian corridors; in addition, evaluate opportunities to revert some existing concrete-lined channels to more natural alternatives such as levees.

Action CON-3h: Continue to work collaboratively with the Santa Clara Valley Water District to institute on-going programs to remove invasive plant species and harmful insects from sensitive habitat areas, primarily by means other than application of herbicides and pesticides.

Action CON-3i: Continue to collaborate with the Santa Clara Valley Water District, and pursue grant funding from the district to support the priorities and projects of the Safe, Clean Water and Natural Flood Protection Program.

Action CON-3j: Coordinate with the California Department of Fish and Wildlife, Santa Clara County, the Santa Clara Valley Water District, and local watershed protection groups to identify potentially impacted aquatic habitat within Milpitas and to develop riparian management guidelines to be implemented by development, recreation, and other projects adjacent to creeks, streams, and other waterways. Efforts should result in standards to reduce impacts between urban development and riparian corridors, including lighting restrictions, pollution controls, noise reduction, and other measures deemed appropriate to preserve and enhance the biological function of habitat

Action CON-3k: Encourage volunteer-based programs that organize community creek restoration and/or clean-up events and provide public education regarding the benefits of city and regional water resources.

Action CON-3l: Provide a conservation page (or similar page) on the City's website that provides links to resource agencies (i.e., CDFW, USFWS, USACE, etc.) and provides information regarding local and regional conservation and environmental programs, to the extent that the City has readily available information.

Impact 3.4-5: The General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

The proposed project is a policy document, in which local policies are established. This EIR presents the numerous policies of the General Plan. The General Plan itself does not conflict with its policies. Subsequent development projects will be required to comply with the General Plan policies, as well as the Municipal Code. This is a **less than significant** impact.

Impact 3.4-6: General Plan implementation would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan (Less than Significant)

The Santa Clara Valley Habitat Plan is a habitat conservation plan (HCP) and natural community conservation plan (NCCP) encompassing about 812 square miles, or approximately 62 percent of Santa Clara County. The City of Milpitas is currently not a permittee of the Santa Clara Valley

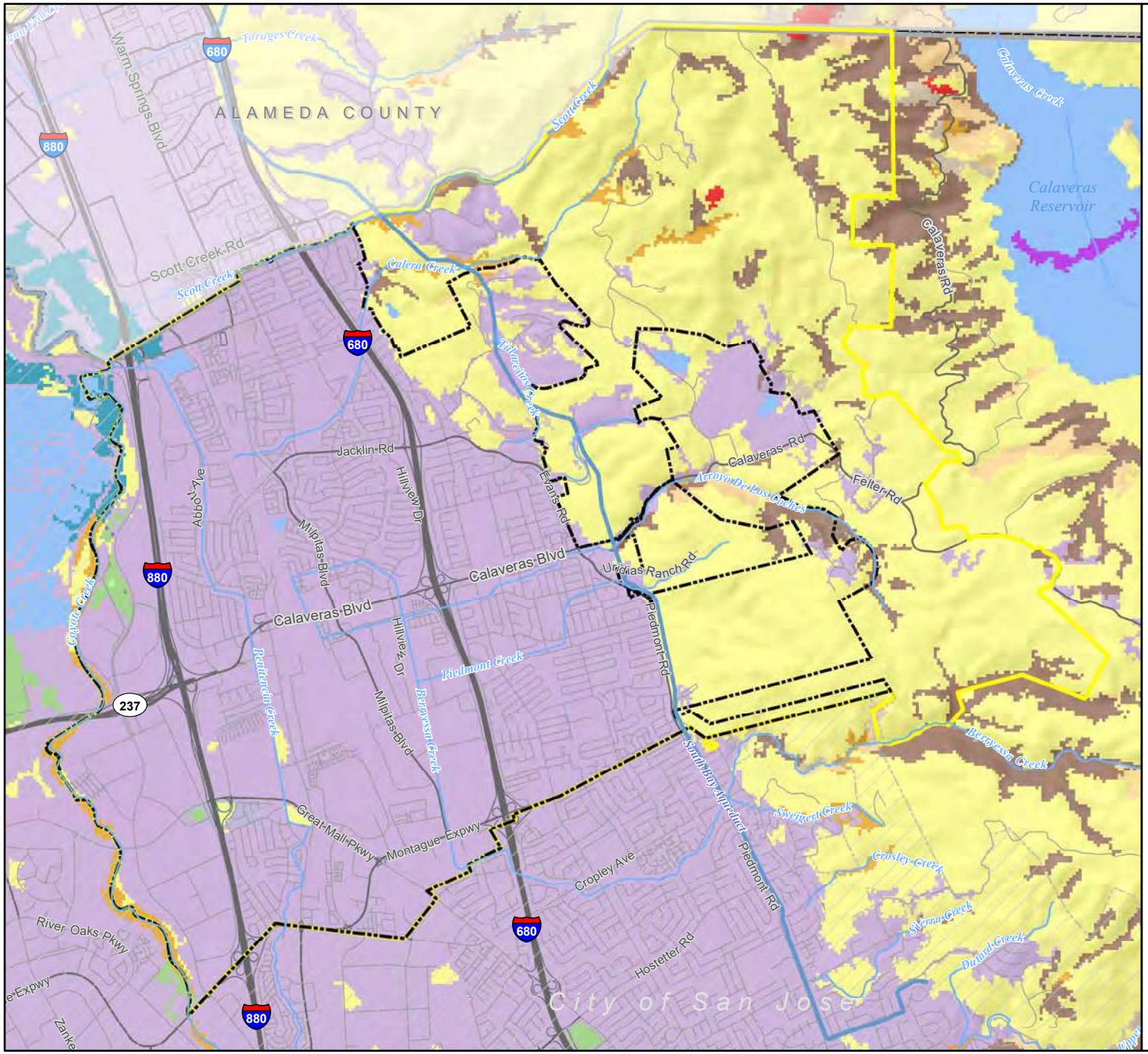
Habitat Plan and the land within the City limits is not within the Habitat Plan Study Area and Permit Area; however, it should be noted that land within the City of Milpitas Sphere of Influence is within the Habitat Plan permit area and the land within the City limits is within the expanded study area and permit area for Burrowing Owl Conservation.

The proposed General Plan Land Use Map does not re-designate any land currently designated for open space or habitat protection. Though Milpitas is not a permittee of the Santa Clara Valley Habitat Plan, future projects will be required to comply with the Santa Clara Valley HCP through the implementation of Action CON-3a. Action CON-3a from the Conservation and Open Space Element of the General Plan requires new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Santa Clara Valley Habitat Plan to ensure that potentially significant impacts to special status species and sensitive resources are adequately addressed. Through implementation of this Action, the General Plan would have a **less than significant** impact relative to this topic.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON-3a: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Santa Clara Valley Habitat Plan to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.



CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.4-1. Cover Type

Wildlife Habitat Relationship (WHR) Type

- Annual Grassland
- Blue Oak Woodland
- Coastal Oak Woodland
- Valley Oak Woodland
- Coastal Scrub
- Cropland
- Irrigated Grain Crops
- Dryland Grain Crops
- Vineyard
- Fresh Emergent Wetland
- Saline Emergent Wetland
- Lacustrine
- Montane Hardwood
- Valley Foothill Riparian
- Urban

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

N

0 ¼ ½

Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atlas; FRAP Vegetation (FVEG15-1). Map date: June 10, 2016.

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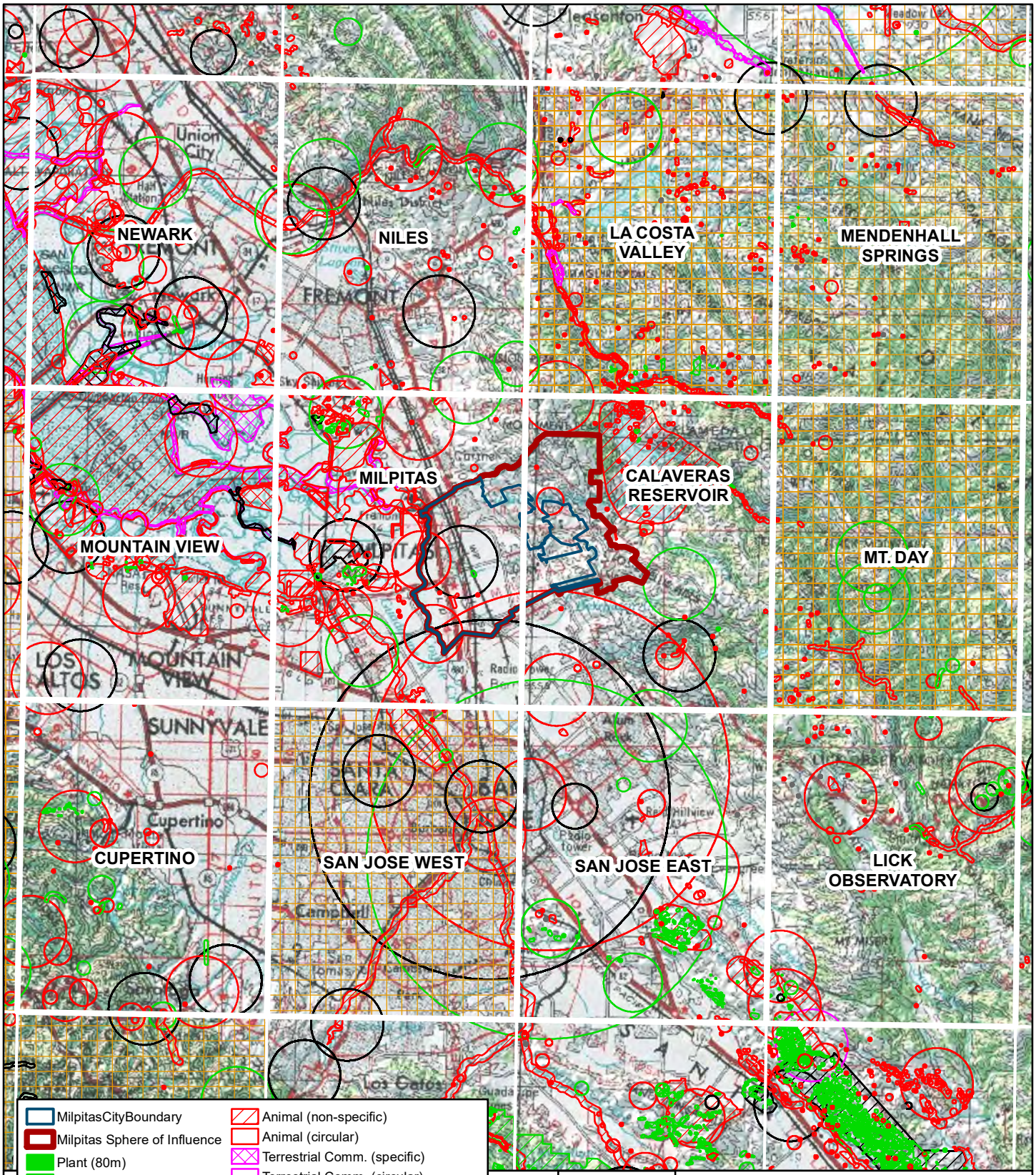

CNDDB version 7/2020. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: July 22, 2020.

** Because the planning area overlaps two USGS quads, the standard 9-quad search parameter was extended to12 quads.*

MILPITAS GENERAL PLAN UPDATE

Figure 3.4-2. California Natural Diversity Database

9-Quad* Search

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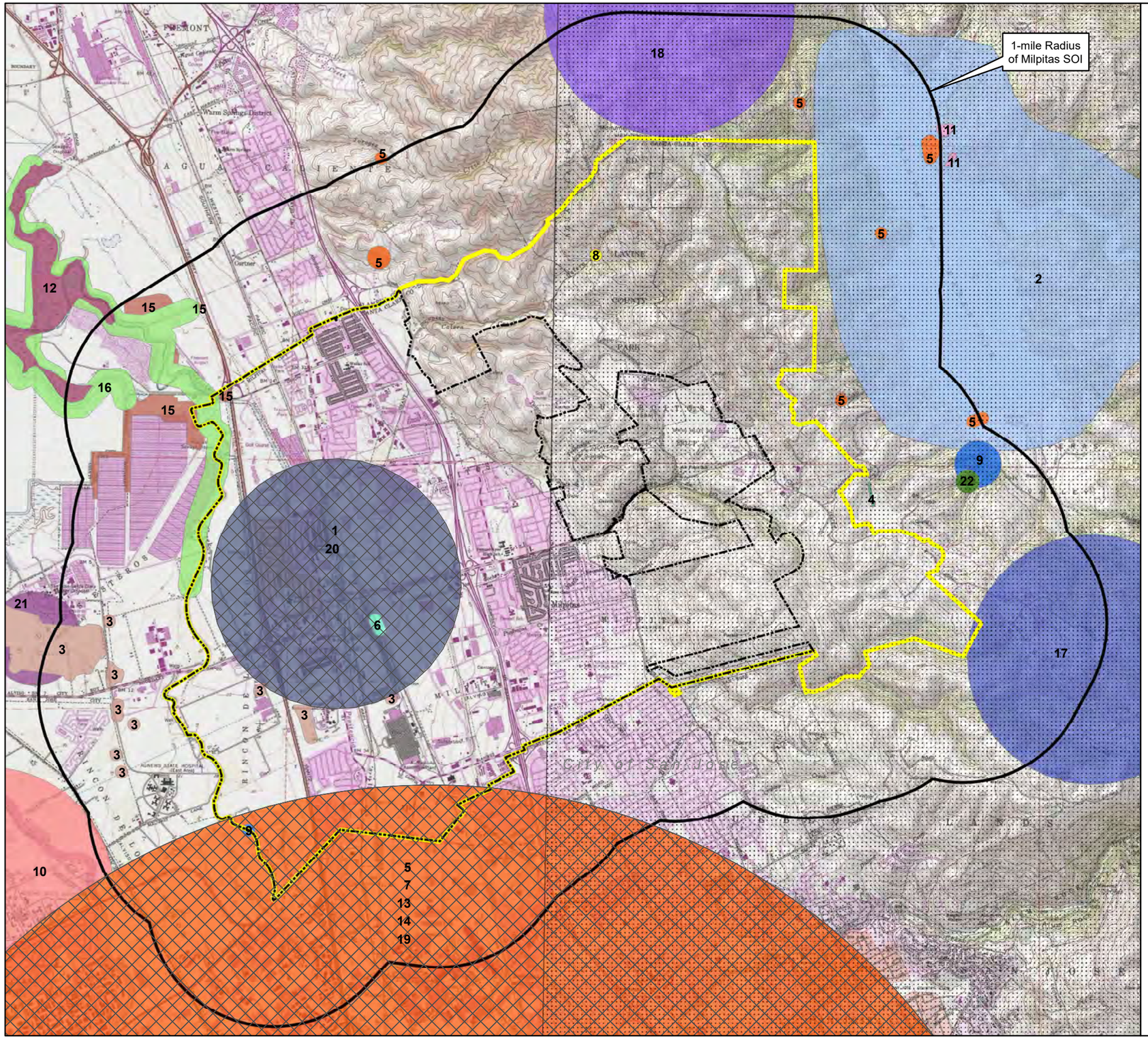
CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.4-3.
California Natural Diversity Database
Special Status Species
1-mile Radius Search



Map Label: Common Name: Occurrence Count

- 1: alkali milk-vetch: 1
- 2: Berkeley kangaroo rat: 1
- 3: burrowing owl: 9
- 4: California red-legged frog: 1
- 5: California tiger salamander: 8
- 6: Congdon's tarplant: 1
- 7: Crotch bumble bee: 1
- 8: golden eagle: 1
- 9: great blue heron: 2
- 10: Hoover's button-celery: 1
- 11: most beautiful jewelflower: 1
- 12: Northern Coastal Salt Marsh: 1
- 13: obscure bumble bee: 1
- 14: robust spineflower: 1
- 15: salt-marsh harvest mouse: 4
- 16: saltmarsh common yellowthroat: 1
- 17: Santa Clara red ribbons: 1
- 18: Townsend's big-eared bat: 1
- 19: western bumble bee: 1
- 20: western yellow-billed cuckoo: 1
- 21: white-tailed kite: 1
- 22: Yuma myotis: 1
- Area of Multiple Species Occurrence
- Sensitive Environmental Occurrence: *Alameda whipsnake*

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- Water Features

N
0 1,000 2,000
Feet
1:52,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; California Natural Diversity Database, June 7, 2016; ArcGIS Online USGS Topographic Map Service. Map date: June 13, 2016.

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Cultural resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. Tribal cultural resources include site feature, places, cultural landscapes, sacred places or objects, which is of cultural value to a Tribe. Preservation of the city's cultural heritage should be considered when planning for the future.

This section provides a background discussion of the prehistory, ethnology, historical period background, and cultural resources and tribal cultural resources found in Milpitas. This section is organized with an existing setting, regulatory setting, and impact analysis.

One comment was received during the NOP public review period relevant to cultural resources or tribal cultural resources. The Native American Heritage Commission (NAHC) provided a standard response letter providing information on relevant tribal consultation requirements. The letter did not provide any input specific to Milpitas or the proposed project.

KEY TERMS

The following key terms are used throughout this section to describe cultural and tribal resources and the framework that regulates them:

Archaeology. The study of historic or prehistoric peoples and their cultures by analysis of their artifacts and monuments.

Ethnography. The study of contemporary human cultures.

Complex. A patterned grouping of similar artifact assemblages from two or more sites, presumed to represent an archaeological culture.

Midden. A deposit marking a former habitation site and containing such materials as discarded artifacts, bone and shell fragments, food refuse, charcoal, ash, rock, human remains, structural remnants, and other cultural leavings.

3.5.1 ENVIRONMENTAL SETTING

PREHISTORY

Humans are believed to have resided in northern Santa Clara County for the past 13,000 years. Archeologists who have studied these past cultures have uncovered evidence of widespread activities that allowed them to divide these previous 13,000 years into periods or phases based on the kinds of subsistence behaviors practiced.

Six periods have been identified with locally defined phases and regional cultures added to the mix. The six periods include the following (Milliken et al. in Jones and Klar 2007):

- Early Holocene (Lower Archaic), 8000 – 3500 B.C
- The Early Middle Period (Middle Archaic), 3500 B.C. – 500 B.C.
- The Lower Middle Period (Initial Upper Archaic), 500 B.C. – A.D. 430

- Upper Middle Period (Late Upper Archaic), A.D. 430 – A.D. 1050
- Initial Late Period (Lower Emergent), A.D. 1050 – A.D. 1550
- Terminal Late Period (Protohistoric Ambiguities), A.D. 1550 – 1775

Early Holocene (Lower Archaic), 8000 B.C. – 3500 B.C.

Few Bay Area sites have been discovered to represent this time period. During this time, a pattern of generalized mobile foraging with artifacts such as the millingslab and handstone (mano and metate), and large wide stem and leaf shaped projectile points were common.

The Early Middle Period (Middle Archaic), 3500 B.C. – 500 B.C.

New technological advances involving the use of the mortar and pestle first appear during this period as does the first evidence for the manufacture of shell beads. Researchers suggest increased sedentism occurred during this time, as did an expansion in trade.

The Lower Middle Period (Initial Upper Archaic), 500 B.C. – A.D. 430

A dramatic shift in the types of shell beads being manufactured is observed during this time with components dating to this period. New types of bone tools, such as the barbless fish hooks, first appeared indicating an increasing exploitation of the immediate environment, probably brought on by increasing populations pressures.

Upper Middle Period (Late Upper Archaic), A.D. 430 – A.D. 1050

During A.D. 430, another dramatic shift in the selection of bead styles and the way people were buried occurred. What caused this dramatic cultural upheaval is uncertain. The formally popular style of shell beads became obsolete with new, smaller varieties becoming widespread.

Initial Late Period (Lower Emergent), A.D. 1050 – A.D. 1550

During this time, populations continued to increase as did resource exploitation. Additionally, a new level of the manufacture of numerous, finely-made grave goods that were buried with the dead existed. Social stratification can also be observed in the differing amounts of grave goods interred with a particular individual. The bow and arrow appeared in the area around A.D. 1250 causing, among other things, a shift in the procurement of rock types and sources used in the manufacture in this new technological innovation.

Terminal Late Period (Protohistoric Ambiguities), A.D. 1550 – 1775

During this time, the style of shell beads abruptly changed throughout the Bay Area. Grave goods became less common and some researchers have suggested that populations were faced with increasing stress by over population and perhaps the early introduction of European-based diseases.

ETHNOLOGY

Ohlone

Tamyen ancestors of the Ohlone people moved into the San Francisco and Monterey Bay areas from the Delta of the San Joaquin and Sacramento rivers around A.D. 500. The designation "Costanoan," which was originally applied to this group by anthropologists and others, derives

from the Spanish term for coastal people and was not used by the Indian people. Ohlone territory extended from the Carquinez Strait in the northeast to just south of Chalome Creek in the southeast and from San Francisco to the Sur River along the Coast. This vast territory was broken into eight different language-based zones. These eight branches of the Costanoan linguistic family were separate languages, not dialects.

The Planning Area lies in the northern portion of the territory of the Tamyen. The Tamyen Costanoan occupied the land in the Santa Clara Valley south of San Francisco Bay. They situated their permanent villages on high ground above seasonal marshes that were inundated by highwater for a few months of the year. Access to fresh drinking water was a criterion for selecting a village location.

The basic political unit of the Ohlone, like many Californian Native Americans, was the tribelet, a group of people who spoke a common language and lived in a contiguous area centered on a main village. Territorial boundaries of tribelets were defined by physiographic features. Tribelet chiefs might be either men or women. The office was inherited patrilineally, usually passing from father to son. When there were no male heirs, the position went to the man's sister or daughter. Accession to the office of chief required approval of the community. The chief was responsible for feeding visitors, providing for the impoverished, directing ceremonial activities, caring for captive grizzly bears and coyote, and directing hunting, fishing, gathering, and warfare expeditions. In all these matters, the chief acted as the leader of a council of elders. The chief and council served mainly as advisors to the community (Levy 1978:487).

The Ohlone had mixed relations with various peoples. Wars were waged both among the various Costanoan tribelets and with Esselen, Salinan, and Northern Valley Yokuts. At the same time, however, they augmented the wealth of locally-available resources by trading with the Plains Miwok, Sierra Miwok, and Yokuts. The Ohlone supplied mussels, abalone shells, salt, and dried abalone to the Yokuts, bows to the Plains Miwok, and Olivella shells to the Sierra Miwok. In return, they received piñon nuts from the Yokuts and likely clam shell disk beads from the Miwok (Levy 1978:488-489, 493).

The Ohlone followed a seasonal round of subsistence activities, gathering plant and animal foods and materials for baskets and other manufactures. They insured a sustained yield of plant and animal foods by careful management of the land. Large mammals consumed by the Ohlone included black-tailed deer, Roosevelt elk, antelope, grizzly bear, mountain lion, sea lion, and whale. The most effective method of hunting deer was stalking by individual hunters. Other mammals eaten included dog, wildcat, skunk, raccoon, brush rabbit, cottontail, jackrabbit, tree squirrel, ground squirrel, woodrat, mouse, and mole. Some of the types of fowl eaten include the Canadian goose, snow goose, pintail mallard, and mourning dove. In addition to animals, the Ohlone also ate seeds and berries, such as acorns, buckeye, blackberries, strawberries, and wild grapes, among others (Levy 1978:491).

Religion and ceremony played important roles in life and death. The Ohlone observed rituals at important life events such as birth, puberty, and death. Treatment of the dead varied, with northern groups reportedly cremating their dead except when there were no kinsman to gather

wood for a funeral pyre, in which case the corpse was buried (Kroeber 1925:469; Levy 1978:490). The southern groups, Rumsen and Chalon, buried their dead.

Shamans controlled the weather and could cause rain to start or stop. They cured disease by cutting the skin of the patient, sucking out the disease objects, and exhibiting them to onlookers. Shamans also used herbs in curing disease and conducted performances to insure good crops of acorns, an abundance of fish, or the stranding of whales (Levy 1978:490).

Spanish explorers of coastal California between 1767 and 1776 described the Costanoans living a traditional existence. Between 1770 and 1797, the Franciscans established seven missions in Ohlone territory and effectively changed the Indian way of life. Unwilling recruits to the missions resisted control by Franciscans. In 1793, a runaway neophyte named Charquin began a three-year struggle during which tribes in the northeast Bay Area engaged in sporadic warfare with the Spanish. The Ohlone also mounted resistance against Mission San Jose in 1800 (Castillo 1978:103). Levy (1978:486) reports that "mission baptismal records demonstrate that the last Costanoan tribelets living an aboriginal existence had disappeared by 1810," and that by 1832 the Costanoan population had decreased to one-fifth or less than its pre-contact size. After the Mexican government secularized the missions (between 1834 and 1836), some Ohlone returned to traditional religious and subsistence practices while others worked on Mexican ranchos. Former mission residents formed multi-tribal Indian communities in Pleasanton and other locations within their traditional territory. Although the Ohlone languages were probably extinct by 1935, it has been estimated that more than 200 persons of Ohlone descent were living in 1973 (Levy 1978:487).

HISTORIC PERIOD BACKGROUND

Early settlement in the region by Europeans began with the establishment of the Mission Santa Clara de Asís in 1777, and the community that developed in the region. In 1797, the Franciscan fathers established a second mission in the region with Mission San Jose in what is now Fremont, Mission San José.

The lands of the City of Milpitas were originally awarded to individuals as land grants. The northern portion of the City lies on Rancho Agua Caliente, first granted to Antonio Suñol by the Spanish authorities, and later released and granted to Fulgencio Higuera in 1839. The rancho had been named for the hot springs present on the site.

The central portion of the City lies on lands of Rancho Tularcitos. This 4,394-acre tract was granted by the last Spanish governor of Alta California to José Higuera in 1821. The grant was renewed in 1839, and eventually confirmed to Higuera's heirs in 1870. After this time, the land was purchased by Henry Curtner, whose family retained ownership of a portion of the land for many years, donating the Higuera adobe and surrounding area as a park in 1970.

To the south of Rancho Tularcitos are the lands of Rancho Milpitas. Rancho Milpitas was claimed by two different individuals: Nicolás Berryessa, who believed it was his land through a decree issued by Alcalde Pedro Chaboya in 1834, and José Maria Alviso, to whom it was granted by Governor José Castro in 1835. In 1855, the Land Commission rejected the Berryessa claim, and

confirmed Alviso's claim of 4,471 acres in 1871. The Alviso Adobe still stands in the eastern portion of the City.

The western portion of the City lies on Rancho Rincón de los Esteros. This tract was awarded by Governor Alvarado in 1838 to Ygnacio Alviso, the father of José Maria Alviso, the grantee of Rancho Milpitas. After the death of Don Ygnacio in 1848, the Rancho was divided into three parts, two confirmed to different owners in 1857, and patented in 1862 and 1872. The Alviso family retained a tract of 2,200 acres.

The lands of the ranchos were sold off to some of the foreign settlers who travelled to the region in the 1830s and 1840s, including members of the Murphy family. The main travel route in the region was the road between the two missions, parallel to Penitencia Creek. The lands were used for agricultural purposes.

The town of Milpitas began in 1856, with the first building erected by Frederick Creighton in 1856. At this time, a post office was established to serve the area and Creighton served as postmaster. The following year, the first hotel was established in town. The community expanded to provide goods and services for the farmers and ranchers of the region. In the 1880s, the population had expanded to about 200 and the town was an important provider of strawberries and asparagus crops.

The railroad line was extended through the region in 1869, adding greater contact with the larger marketplace for the production from the ranchers and farmers. The town continued to grow slowly with social institutions such as churches and schools developing in the community. By 1922, the town had expanded to a population of 800. During this time, the California Packing Company, two warehouses, a Standard Oil Plant, large dairy businesses, a sugar beet company, a squab farm, and large potato and grain farms existed within the town. The Western Pacific rail line was also completed to the area, which provided additional shipping for the canneries.

In 1950, there were still only 800 residents in town, but the town also provided goods and services for 4,200, half of whom lived on farms. There were 2,700 acres in truck farms, 311 acres in dairy farms, and 4,500 of dry land farming. Civic improvements began in the early 1950s.

The most major change in the town's history came in 1953 with the purchase of a 160-acre tract by the Ford Motor Company. The plant was planned to assemble automobiles for the eight western states as well as Hawaii and Alaska. The plant covered 34 acres and contained 1.4 million square feet of floor space. With the pending problems of providing housing, streets, and utilities for the new work force, the election provided a vote for incorporation of the town in 1954. The town was expected to double in size in a year, and eventually reach a population of 5,000. The plant was sited near the two railroad lines.

The Sunnyhills housing development in Milpitas, tied to the Ford Plant, represents an important chapter in African American history. The introduction of the Ford Motor Company into the political economy of the County disrupted patterns of racial exclusion in the local economy as well in the housing market.

The United Auto Workers (UAW) attempted to maintain worker solidarity through the integration of the Milpitas plant. Local 560 of the UAW was able to obtain a guarantee from Ford that the union members would maintain their seniority rights in Milpitas, offering an incentive to move there. To help win Ford's in the selection of Milpitas for the new plant, the town agreed to develop Sunnyhills, one of the first planned integrated subdivisions in the United States. The suburban community was dominated by working class families employed by Ford. The development of the community in the mid-1950s faced many challenges, and the UAW's efforts lead to a coalition of racial liberals. The coalition forced the County Board of Supervisors to approve the UAW's plan for open housing and forced Ford to take a support of the union's seniority rights of its African American workers. Benjamin Franklin (Ben) Gross, an African American, was appointed as chairman of the Local 560's special housing subcommittee.

Sunnyhills opened in 1957 as the first planned interracial community in the western United States. By 1962, only fifteen percent of the over five hundred Sunnyhills residences were occupied by African Americans. Even as Ford expanded the workforce, the percentage of African American occupants never climbed much higher. In the 1960s, African Americans were residentially locked out of most parts of Santa Clara County, outside of Sunnyhills.

African American participation in the UAW and the Sunnyhills United Methodist church brought the black community closer to the city, with Sunnyhills central in the defeat of San Jose's attempt to annex Milpitas to gain the tax base represented by the Ford facility. The political success of the independence movement of Milpitas and the role of Ben Gross propelled him into Milpitas city politics, serving five terms on the city council, with two terms as mayor and a term as vice-mayor. Gross was the first African American mayor of a city in California.

In the 1980s, the town changed direction with the growth of the high-tech industry. In 1983, Ford closed the plant at a loss of 2,400 jobs. The City attracted many Silicon Valley professionals who preferred the lower home prices available at the time. The City increased in population in the 1980s by a third, and by 1992, the population was about 54,000. The Ford Motors Assembly Plant has been converted to use as the regional shopping mall, the Great Mall of the Bay Area.

CULTURAL RESOURCES IN MILPITAS GENERAL PLAN STUDY AREA

Thirty-three cultural resources have been identified within the City of Milpitas General Plan Study Area, according to files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS). The thirty-three recorded cultural resources represent both the prehistoric and historic periods. As shown in Table 3.5-1, the thirty-three recorded cultural resources consisting of historic buildings and railroads, prehistoric villages, prehistoric artifacts, and refuses.

TABLE 3.5-1: RESOURCES LISTED WITH THE NORTHWEST INFORMATION CENTER FILE DIRECTORY

PROPERTY #	*ADDRESS*	*PERIOD/TYPE*	*NAME*
P-01-002172	48943 Rosegarden Court, Fremont	Historic Building	Frank Rose Farm
P-43-000057 / CA-SCL-38	Not Listed	Prehistoric Village	Alma House Mound

PROPERTY #	*ADDRESS*	*PERIOD/TYPE*	*NAME*
P-43-000139 / CA-SCL-126	Not Listed	Prehistoric Village	Not Listed
P-43-000167 / CA-SCL-155/H	Not Listed	Prehistoric Village/Historic Building, Refuse	Jose Maria Alviso Adobe
P-43-000432 / CA-SCL-429/H	Not Listed	Prehistoric, Historic Building, Refuse	Higuera Adobe Park
P-43-000530 / CA-SCL-529H	Not Listed	Historic Refuse	Not Listed
P-43-000588 / CA-SCL-593	Not Listed	Prehistoric Village	Berryessa Creek Site
P-43-000624 / CA-SCL-677	Not Listed	Prehistoric Village	The 237/880 Site
P-43-000928 / CA-SCL-898H	Not Listed	Historic Railroad	Southern Pacific Railroad
P-43-001060 / CA-SCL-678	Not Listed	Prehistoric Village	ARCO Burials
P-43-001169	1252 North Victoria Park Drive, Milpitas	Historic Building	Not Listed
P-43-001268	Not Listed	Prehistoric Artifact	ISO-JN2
P-43-001816	Not Listed	Historic Building	Great Mall of the Bay Area/Old Ford Motor Assembly Plant
P-43-002275	Not Listed	Historic Refuse	Not Listed
P-43-002654 / CA-SCL-945H	Not Listed	Historic Railroad	Western Pacific Railroad, San Jose Branch
P-43-002687	Not Listed	Historic Building, Refuse	Shaughnessy Murphy Ranch
P-43-003005 / CA-SCL-928	Not Listed	Prehistoric Village	Milpitas Great Mall Site
P-43-003493	512 Capital Avenue, Milpitas	Historic Building	Not Listed
P-43-003504	0 Magnolia Drive, Milpitas	Historic Farm/ Ranch	Not Listed
P-43-003537	Not Listed	Historic Building	Barber Lane
P-43-003538	Not Listed	Historic Building	Barber Lane
P-43-003539	152 Evening Star Court, Milpitas	Historic Building	Not Listed
P-43-003540	166 Evening Star Court, Milpitas	Historic Building	Not Listed
P-43-003541	186 Evening Star Court, Milpitas	Historic Building	Not Listed
P-43-003542	1337 Galaxy Court, Milpitas	Historic Building	Not Listed
P-43-003543	Not Listed	Historic Building	Milpitas Grammar School/Milpitas Senior Center
P-43-003544	1249 Starlite Court, Milpitas	Historic Building	Not Listed
P-43-003545	1401 Starlite Drive, Milpitas	Historic Building	Not Listed
P-43-003546	Not Listed	Historic Building	Calaveras Hills High School
P-43-003548	Not Listed	Historic Building /Farm, Ranch	Elmwood Rehabilitation Center/ Santa Clara County Almshouse
P-43-003552	Not Listed	Historic Building	Santa Clara County Fire Station #2

PROPERTY #	ADDRESS	PERIOD/TYPE	NAME
P-43-003553	Not Listed	Historic Building	Santa Clara County Fire Station #3
P-43-003554	Not Listed	Historic Building	Santa Clara County Fire Station #1

SOURCE: NORTHWEST INFORMATION CENTER (NWIC), CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM (CHRIS).

Twenty-five buildings within the City of Milpitas General Plan Area are identified on the Santa Clara County Historic Property Data File Directory (see Table 3.5-2). Some resources appear on multiple directories (NWIC list of resources/Santa Clara County Historic Property Directory). Table 3.5-2 indicates these overlapping entries with asterisks. An asterisk indicates the resource is also listed on the NWIC list of resources.

TABLE 3.5-2: BUILDINGS ON THE SANTA CLARA COUNTY HISTORIC PROPERTY DATA FILE DIRECTORY

PROPERTY #	ADDRESS	YEAR BUILT	NAME
013683*	Barber Lane, Milpitas	1945	Not Listed
013682*	Barber Lane, Milpitas	1930	Not Listed
013687*	152 Evening Star Court, Milpitas	1975	Not Listed
013679*	166 Evening Star Court, Milpitas	1975	Not Listed
013680*	186 Evening Star Court, Milpitas	1975	Not Listed
013677*	1337 Galaxy Court, Milpitas	1975	Not Listed
161552*	459 Great Mall Drive, Milpitas	1954	Not Listed
072051*	0 Magnolia Drive, Milpitas	1910	Farm
096146*	45 Midwick Street, Milpitas	1961	Santa Clara County Fire Station #3
098424	Mill Street	1930	Alviso Water Tower
077357*	160 North Main Street, Milpitas	1916	Milpitas Grammar School
123744*	1252 North Park Victoria Drive, Milpitas	Not Listed	Not Listed
107269*	92 Piedmont Road, Milpitas	1853	Jose Maria Alviso Adobe
013687*	701 South Abel Street, Milpitas	1960	Elmwood Rehabilitation Administration Building
013688*	701 South Abel Street, Milpitas	1960	Elmwood Rehabilitation Women's' Facility
013684*	701 South Abel Street, Milpitas	1938	Santa Clara County Almshouse
013685*	701 South Abel Street, Milpitas	1941	Elmwood Rehabilitation Barn
013686*	701 South Abel Street, Milpitas	1941	Elmwood Rehabilitation Shed
013676*	1249 Starlite Court, Milpitas	1975	Not Listed
013675*	1401 Starlite Drive, Milpitas	1975	Not Listed
013681*	Sylvia Avenue, Milpitas	1962	Calaveras Hills High School
067690	Tasman Drive, Milpitas	Not Listed	Not Listed
096144*	25 West Curtis Street, Milpitas	1961	Santa Clara County Fire Station #1
123745*	823 Wessex Place, Milpitas	1828	Jose Higuera Adobe
096145*	1263 Yosemite Drive, Milpitas	1961	Santa Clara County Fire Station #2

*NOTES: * = RESOURCE IS LISTED ON THE NWIC LIST OF RESOURCES*
SOURCE: SANTA CLARA COUNTY HISTORIC PROPERTY DATA FILE DIRECTORY.

NATIVE AMERICAN CONSULTATION

During initial outreach for the General Plan update in 2016, the Native American Heritage Commission responded with a letter dated August 16, 2016. The NAHC conducted a records search of the NAHC Sacred Lands File for the area of potential effect with negative results.

The City conducted Native American consultations under Senate Bill 18 (Chapter 905, Statutes of 2004), also known as SB18, which requires local governments to consult with Tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. The NAHC provided a list of groups for tribal consultation for projects in Santa Clara County. SB 18 Tribal consultation letters regarding the City of Milpitas General Plan Update were sent to: the Native American Heritage Commission; Valentine Lopez, Amah Mutsun Tribal Band; Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista; Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Coastanoan; Rosemary Cambra, Chairperson, Muwekma Ohlone Indian Tribe of the SF Bay Area; Katherine Erolinda Perez, Chairperson, North Valley Yokuts; Andrew Galvin, Ohlone Indian Tribe; and the Milpitas Historical Society, and Monica Arellano, Vice Chairwoman-Muwekma Ohlone Indian Tribe of the SF Bay Area.

The City sent letters to all Tribal Organizations via certified mail at the start of the City of Milpitas General Plan Update in 2016. Follow up letters were sent on June 23, 2020 during the NOP period to all tribes identified above. To date, no responses have been received.

With respect to tribal consultation pursuant to Assembly Bill 52 (AB 52), City staff noted that no tribes have requested the City of Milpitas notify them through a formal notification process of proposed projects requiring the preparation of a negative (mitigated) declaration or EIR; therefore, no AB 52 tribal notification letters have been sent out for the proposed project.

3.5.2 REGULATORY SETTING

FEDERAL REGULATIONS

National Historic Preservation Act

Most regulations at the Federal level stem from the National Environmental Policy Act (NEPA) and historic preservation legislation such as the National Historic Preservation Act (NHPA) of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for Federal land-holding agencies, but also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any Federal agency and which have the potential to affect cultural resources. All projects that are subject to NEPA are also subject to compliance with Section 106 of the NHPA and NEPA requirements concerning cultural resources. Provisions of NHPA establish a National Register of Historic Places (The National Register) maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

American Indian Religious Freedom Act and Native American Graves and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

Other Federal Legislation

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on federal land. New permits are currently issued under the Archaeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE REGULATIONS

California Register of Historic Resources (CRHR)

California State law also provides for the protection of cultural resources by requiring evaluations of the significance of prehistoric and historic resources identified in documents prepared pursuant to the California Environmental Quality Act (CEQA). Under CEQA, a cultural resource is considered an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. Criteria identified in the CEQA Guidelines are similar to those described under the NHPA. The State Historic Preservation Office (SHPO) maintains the CRHR. Historic properties listed, or formally designated for eligibility to be listed, on The National Register are automatically listed on the CRHR. State Landmarks and Points of Interest are also automatically listed. The CRHR can also include properties designated under local preservation ordinances or identified through local historical resource surveys.

California Environmental Quality Act (CEQA)

CEQA requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. This determination applies to those resources which meet significance criteria qualifying them as “unique,” “important,” listed on the California Register of Historical Resources (CRHR), or eligible for listing on the CRHR. If the agency determines that a project may have a significant effect on a significant resource, the project is determined to have a significant effect on the environment, and these effects must be addressed. If a cultural resource is found not to be significant under the qualifying criteria, it need not be considered further in the planning process.

CEQA emphasizes avoidance of archaeological and historical resources as the preferred means of reducing potential significant environmental effects resulting from projects. If avoidance is not feasible, an excavation program or some other form of mitigation must be developed to mitigate the impacts. In order to adequately address the level of potential impacts, and thereby design appropriate mitigation measures, the significance and nature of the cultural resources must be determined. The following are steps typically taken to assess and mitigate potential impacts to cultural resources for the purposes of CEQA:

- identify cultural resources;
- evaluate the significance of the cultural resources found;
- evaluate the effects of the project on cultural resources; and
- develop and implement measures to mitigate the effects of the project on cultural resources that would be significantly affected.

In 2015, CEQA was amended to require lead agencies to determine whether projects may have a significant effect on tribal cultural resources. (Public Resources Code [PRC] § 21084.2). To qualify as a tribal cultural resource, the resource must be a site, feature, place, cultural landscape, sacred place, or object, which is of cultural value to a California Native American Tribe and is listed, or eligible for listing, on the national, state, or local register of historic resources. Lead agencies may also use their discretion to treat any notable resource as a tribal cultural resource. To determine whether a project may have an impact on a resource, the lead agency is required to consult with any California Native American tribe that requests consultation and is affiliated with the geographic area of a proposed project (PRC § 21080.3.1). CEQA requires that a lead agency consider the value of the cultural resource to the tribe and consider measures to mitigate any adverse impact.

California Public Resources Code

Section 5097 of the Public Resources Code specifies the procedures to be followed in the event of the unexpected discovery of historic, archaeological, and paleontological resources, including human remains, historic or prehistoric resources, paleontological resources on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the California Native American Heritage Commission (NAHC). Section 5097.5 of the Code states the following:

> *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.*

California Health and Safety Code

Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native

American, the coroner must contact the California Native American Heritage Commission. CEQA Guidelines (Section 15064.5) specify the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the Native American Heritage Commission.

Senate Bill 18 (Burton, Chapter 905, Statutes 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. This legislation, which amended §65040.2, §65092, §65351, §65352, and §65560, and added §65352.3, §653524, and §65562.5 to the Government Code; also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. 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. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.).

Assembly Bill 978

In 2001, Assembly Bill (AB) 978 expanded the reach of Native American Graves Protection and Repatriation Act of 1990 and established a State commission with statutory powers to assure that Federal and State laws regarding the repatriation of Native American human remains and items of patrimony are fully complied with. In addition, AB 978 also included non-Federally recognized tribes for repatriation.

Assembly Bill 52

Assembly Bill (AB) 52, approved in September 2014, creates a formal role for California Native American tribes by creating a formal consultation process and establishing that a substantial adverse change to a tribal cultural resource has a significant effect on the environment. Tribal cultural resources are defined as:

1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    A) Included or determined to be eligible for inclusion in the CRHR
    B) Included in a local register of historical resources as defined in PRC Section 5020.1(k)
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1 (c). In applying the criteria set forth in PRC Section 5024.1 (c) the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape that meets the criteria above is also a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. In addition, a historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in PRC Section 21083.2(g), or a "non-unique archaeological resource" as defined in PRC Section 21083.2(h) may also be a tribal cultural resource if it conforms with above criteria.

AB 52 requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

LOCAL REGULATIONS

City of Milpitas Municipal Code

Chapter 4, Cultural Resources Preservation Program, of the Milpitas Municipal Code seeks to balance the needs of the community for preservation and the needs of the community for development through:

- Creation of a Parks, Recreation and Cultural Resources Commission;
- A hearing procedure allowing the inventory of and classification of community cultural resources;
- A permit procedure to allow guidance to owners in the preservation of valuable cultural assets; and
- Providing a provision for a reasonable time during which cultural assets (that might otherwise be lost) can be acquired for preservation by interested individuals or organizations;
- Utilizing statues and ordinances heretofore or hereafter enacted providing for the preservation of cultural assets; and
- Recognition of the right of a landowner to develop property on which cultural assets are located if there are no practical preservation alternatives available.

The Cultural Resources Preservation Program promotes the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation, and use of improvements, buildings, structures, signs, objects, features, sites, places, and areas within the City and its unincorporated sphere of influence that reflect special elements of the City's architectural, artistic, cultural, engineering, esthetic, historical, political, social, and other heritage.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on cultural or tribal resources if it will:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- Disturb any human remains, including those interred outside of formal cemeteries?
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - 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)?
    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: General Plan implementation could cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to Section 15064.5 (Less than Significant)

A substantial adverse change in the significance of an historic resource is defined in Section 15064.5 (b)(1) of the CEQA Guidelines as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. Known historic resource sites are located throughout the Planning Area, as shown in Tables 3.5-1 through 3.5-2, and there is potential for additional undiscovered prehistoric sites to be located in various areas of the city as well.

As described previously, 33 cultural resources have been identified within the City of Milpitas General Plan Study Area, according to files maintained by the NWIC of the CHRIS (see Table 3.5-1). Additionally, 25 buildings within the City of Milpitas General Plan Area are identified on the Santa Clara County Historic Property Data File Directory (see Table 3.5-2). It should be noted that 23 of these resources are also included on the list of resources on file with the NWIC.

While the General Plan does not directly propose any adverse changes to any historic or archaeological resources, future development allowed under the General Plan could affect known historical or unknown historical and archaeological resources which have not yet been identified.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The General Plan includes policies and actions that would reduce impacts to cultural, historic, and archaeological resources, as well as policies and actions for the conservation of cultural, historic, and archaeological resources. Specifically, General Plan policies require development projects with a potential to impact archeological resources to be monitored by a relevant expert. In the event of a resource discovery, it is required that all ground disturbing activities and construction to be halted until a qualified expert is able to analyze the project site and determine appropriate mitigation. Additionally, the General Plan requires tribal consultation with tribes that may be impacted by proposed development, in accordance with state, local, and tribal intergovernmental consultation requirements. Adoption and implementation of the policies and actions listed below, combined with future CEQA review requirements, would result in a **less than significant** to historic and archaeological resources**.**

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON 4-1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

Policy CON 4-3: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

Policy CON 5-1: Protect significant historic resources and use these resources to promote a sense of place and history in Milpitas through implementation of the Milpitas Cultural Resources Preservation Program (Municipal Code, Title XI, Chapter 4), the Conceptual Historic Resources Master Plan, the conservation and preservation of the City's historical collection at the Milpitas Community Museum, and other applicable codes, regulations, and area plans.

Policy CON 5-2: Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

Policy CON 5-3: Provide readily available public information on the Mills Act and encourage people to renovate historic homes in disrepair using property tax savings available through the Mills Act.

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON 4a: Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural or archaeological resources. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource.

Action CON 4b: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Department shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Department.*

- *If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Department and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Planning Department.*

Action CON 5a: Periodically update the City's Cultural Resources Register with new sites or buildings that are of local, State or federal significance.

Action CON 5b: Require recordation of the designation of a Milpitas Cultural Resources Register property on the property title.

Action CON 5c: Create incentives to promote historic preservation, maintenance and adaptive reuse by property owners, such as, expedited permits, lower permit fees, Mills Act Contracts for tax benefits, tax credits, and zero or low-interest loans for income-qualified residents.

Action CON 5d: Continue to implement the City's Conceptual Historic Resources Master Plan and periodically review and modify the Plan as necessary in order to ensure that it continues to meet the City's historic preservation goals.

Action CON 5e: Develop an annual work plan in coordination with the City Council, the Parks, Recreation and Cultural Resources Commission, and the Milpitas Historical Society to further preservation goals.

Action CON 5f: Continue to provide educational resources and public outreach efforts that inform citizens of ways to become involved with local historical preservation efforts including:

- *School age programs, adult lectures, on-line exhibits;*
- *Partnerships with other cultural and historical institutions to promote local awareness and appreciation of Milpitas's rich history; and*

- *Collaboration among community groups, educational institutions, the Milpitas Library and the Milpitas Historical Society.*

Action CON 5g: Use amenities such as signs and historical lighting in key public access areas. Consider incorporating public art to reflect historical elements.

Action CON 5h: Leverage public and private resources to further preservation goals.

Action CON 5i: Consider creation of a City Council policy establishing criteria and standards for new Mills Act contracts.

Impact 3.5-2: Implementation of the General Plan could lead to the disturbance of any human remains (Less than Significant)

Indications are that humans have occupied areas near the Planning Area for at least the past 13,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities allowed under the General Plan may yield human remains that may not be marked in formal burials.

Future projects may disturb or destroy buried Native American human remains, including those interred outside of formal cemeteries. Consistent with state laws protecting these remains (that is, Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98), sites containing Native American human remains must be treated in a sensitive manner.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that Native American human remains are inadvertently discovered during development activities. The General Plan requires that human remains are treated in compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98. Implementation of the policies and actions of the General Plan listed below would result in a **less than significant** impact to disturbance of human remains.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON 4-1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

Policy CON 4-2: If found during construction, ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

Policy CON 4-3: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

Policy CON 4-4: Consistent with State, local, and tribal intergovernmental consultation requirements such as SB 18 and AB 52, the City shall consult as necessary with Native American tribes that may be interested in proposed new development and land use policy changes.

CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

Action CON 4a: Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural or archaeological resources. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource.

Action CON 4b: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Department shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Department.*
- *If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Department and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Planning Department.*

Impact 3.5-3: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074, 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 a resource determined by the lead agency (Less than Significant).

As described previously, the City of Milpitas conducted Native American consultations under Senate Bill 18 (Chapter 905, Statutes of 2004), also known as SB18, which requires local governments to consult with Tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. While no responses have been received and no specific resources have been identified through consultation with affiliated tribes, it is possible that unknown tribal cultural resources may be present and could be adversely affected by implementation of measures and strategies associated with the project.

Specific locations for future development and improvements have not been identified. Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application. The General Plan and local CEQA guidelines require tribal consultation and the protections of any identified archeological and tribal resources.

All future development projects would be required to follow development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of tribal resources. Subsequent projects would be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which also would include additional consultation that could lead to the identification of potential site-specific tribal resources.

As discussed under impact discussions 3.5-1 and 3.5-2, impacts from future development could discover unknown archaeological resources including Native American artifacts and human remains. Impacts would result in a less-than-significant impact with implementation of General Plan policies and actions and local review guidelines. Compliance with the General Plan policies and actions, as well as State and local guidelines would provide an opportunity to identify, disclose, and avoid or minimize the disturbance of and impacts to a tribal resource through consultation and CEQA review procedures. Therefore, implementation of the policies and actions within the General Plan listed below would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON 4-1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

Policy CON 4-2: If found during construction, ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

Policy CON 4-3: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

Policy CON 4-4: Consistent with State, local, and tribal intergovernmental consultation requirements such as SB 18 and AB 52, the City shall consult as necessary with Native American tribes that may be interested in proposed new development and land use policy changes.

Policy CON 5-1: Protect significant historic resources and use these resources to promote a sense of place and history in Milpitas through implementation of the Milpitas Cultural Resources Preservation Program (Municipal Code, Title XI, Chapter 4), the Conceptual Historic Resources Master Plan, the conservation and preservation of the City's historical collection at the Milpitas Community Museum, and other applicable codes, regulations, and area plans.

Policy CON 5-2: Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

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CONSERVATION AND SUSTAINABILITY ELEMENT ACTIONS

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- *If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Department and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may*

only resume when appropriate measures have been taken and approved by the Planning Department.

Action CON 5a: Periodically update the City's Cultural Resources Register with new sites or buildings that are of local, State or federal significance.

Action CON 5b: Require recordation of the designation of a Milpitas Cultural Resources Register property on the property title.

Action CON 5d: Continue to implement the City's Conceptual Historic Resources Master Plan and periodically review and modify the Plan as necessary in order to ensure that it continues to meet the City's historic preservation goals.

Action CON 5e: Develop an annual work plan in coordination with the City Council, the Parks, Recreation and Cultural Resources Commission, and the Milpitas Historical Society to further preservation goals.

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This section provides a background discussion of the seismic and geologic hazards found in the City and the regional vicinity. This section is organized with an environmental setting, regulatory setting, and impact analysis.

No comments on this environmental topic were received during the NOP comment period.

3.6.1 ENVIRONMENTAL SETTING

The City of Milpitas is located in northern Santa Clara County, California approximately 30 miles southeast of San Francisco and north of San Jose. Milpitas extends between the south end of the San Francisco Bay and the Low Buellis Hills of the Mount Diablo Range.

The topography of the Planning Area is characterized by the relatively flat terrain with a hillside area in the eastern portion of the Planning Area near the foothills of the Diablo Range. Elevations in Milpitas range from 23 feet above mean sea level (MSL) in the central portion of the city to 1,270 feet above MSL at the highest peak in the eastern hillside portion of the city.

The City's hillside area is located in the foothills of the Diablo Range and consists of a series of parallel hills and valleys oriented generally northwest/southeast. The rounded hills in the western portion of the hillside area form a band about one-mile-wide with a maximum elevation of about 1,270 feet. Spring Valley, in the central portion of the Milpitas Planning Area, is roughly one-quarter mile wide and two and a half miles long. The central portion of the valley is relatively flat and has an elevation of about 600 feet. Along the eastern boundary of the hillside area rise the steep western slopes of Los Buellis Hills, where the elevation ranges from roughly 800 feet to 2,337 feet at Monument Peak in the north.

GEOMORPHIC PROVINCE

California's geomorphic provinces are naturally defined geologic regions that display a distinct landscape or landform. Earth scientists recognize eleven provinces in California. Each region displays unique, defining features based on geology, faults, topographic relief, and climate. These geomorphic provinces are remarkably diverse. They provide spectacular vistas and unique opportunities to learn about Earth's geologic processes and history. The city of Milpitas lies within the Coast Range Geomorphic Province.

The Coast Range is a northwest-trending mountain range (2,000 to 4,000, occasionally 6,000 feet elevation above sea level) and set of valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Range is composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma, and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long,

extending from Pt. Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands.

REGIONAL GEOLOGY

As noted previously, the Coast Range Geomorphic Province is dominated by northwest-southeast trending ranges of low mountains and intervening valleys. The City of Milpitas is located near the southeastern margin of San Francisco Bay. The bay occupies the upper part of a geological structural depression which has formed over the last 1,000,000 years. However, the southern San Francisco Bay appears to have formed by tectonic subsidence that has occurred over the last 200,000 to 300,000 years. The bay margin is characterized by relatively flat topography developed on recently deposited unconsolidated alluvial and bay deposits. The bay margin lowlands are bounded to the east by the East Bay Hills formed on faulted and folded Franciscan Assemblage bedrock.

SEISMIC HAZARDS

Seismic hazards include both rupture (surface and subsurface) along active faults and ground shaking, which can occur over wider areas. Ground shaking, produced by various tectonic phenomena, is the principal source of seismic hazards in areas devoid of active faults. All areas of the state are subject to some level of seismic ground shaking.

Several scales may be used to measure the strength or magnitude of an earthquake. Magnitude scales (ML) measure the energy released by earthquakes. The Richter scale, which represents magnitude at the earthquake epicenter, is an example of an ML. As the Richter scale is logarithmic, each whole number represents a 10-fold increase in magnitude over the preceding number. Table 3.6-1 represents effects that would be commonly associated with Richter Magnitudes.

TABLE 3.6-1: RICHTER MAGNITUDES AND EFFECTS

MAGNITUDE	*EFFECTS*
< 3.5	Typically not felt
3.5 – 5.4	Often felt but damage is rare
5.5 – < 6	Damage is slight for well-built buildings
6.1 – 6.9	Destructive potential over ±60 miles of occupied area
7.0 – 7.9	"Major Earthquake" with the ability to cause damage over larger areas
≥ 8	"Great Earthquake" can cause damage over several hundred miles

SOURCE: USGS, EARTHQUAKE PROGRAM.

Moment Magnitude (Mw) is used by the United States Geological Service (USGS) to describe the magnitude of large earthquakes in the U.S. The value of moment is proportional to fault slip multiplied by the fault surface area. Thus, moment is a measurement that is related to the amount of energy released at the point of movement. The Mw scale is often preferred over other scales, such as the Richter, because it is valid over the entire range of magnitudes. Moment is normally converted to Mw, a scale that approximates the values of the Richter scale.

Seismic ground shaking hazards are calculated as a probability of exceeding certain ground motion over a period of time, usually expressed in terms of "acceleration." The acceleration of the Earth during an earthquake can be described in terms of its percentage of gravity (g). For example, the 10% probability of exceedance in 50 years is an annual probability of 1 in 475 of being exceeded each year. This level of ground shaking has been used for designing buildings in high seismic areas. This probability level allows engineers to design buildings for larger ground motions than what is expected to occur during a 50-year interval, which will make buildings safer than if they were only designed for the ground motions that are expected to occur in the next 50 years.

The California Geological Survey estimates a 10% probability of exceeding 70 percent of gravity at peak ground acceleration over the next 50 years in the Milpitas Planning Area, as well as other communities within Santa Clara County. Moving east toward Modesto, the estimates decreases to 40 percent or less of gravity at peak ground acceleration.

In contrast, other scales describe earthquake intensity, which can vary depending on local characteristics. The Modified Mercalli Scale (MM) expresses earthquake intensity at the surface on a scale of I through XII. The Milpitas areas could experience considerable ground shaking generated by faults within Santa Clara County. For example, Milpitas could experience an intensity of MM VIII generated by seismic events occurring along the Hayward fault (ABAG, 2016). The following table represents the potential effects of an earthquake based on the Modified Mercalli Intensities.

TABLE 3.6-2: MODIFIED MERCALLI INTENSITIES AND EFFECTS

MM	*EFFECTS*
I	Movement is imperceptible
II	Movement may be perceived (by those at rest or in tall buildings)
III	Many feel movement indoors; may not be perceptible outdoors
IV	Most feel movement indoors; windows, doors, and dishes will rattle
V	Nearly everyone will feel movement; sleeping people may be awakened
VI	Difficulty walking; many items fall from shelves; pictures fall from walls
VII	Difficulty standing; vehicle shaking felt by drivers; some furniture breaks
VIII	Difficulty steering vehicles; houses may shift on foundations
IX	Well-built buildings suffer considerable damage; ground may crack
X	Most buildings and foundations and some bridges destroyed
XI	Most buildings collapse; some bridges destroyed; large cracks in ground
XII	Large scale destruction; objects can be thrown into the air

SOURCE: ASSOCIATION OF BAY AREA GOVERNMENTS, 2011.

The Significant United States Earthquakes data published by the USGS in the National Atlas identifies earthquakes that caused deaths, property damage, geologic effects or were felt by populations near the epicenter. No significant earthquakes are identified within Milpitas; however, significant earthquakes are documented in the region, as presented in Table 3.6-3.

TABLE 3.6-3: SIGNIFICANT EARTHQUAKES IN THE REGION

MAGNITUDE	*INTENSITY*	*LOCATION*	*YEAR*
4.5	VI	Pleasant Hill	2019
4.3	VI	Byron	2019
4.4	V	Berkeley	2018
4.1	IV	Alum Rock	2017
4.0	IV	Aromas	2017
4.0	V	Piedmont	2015
4.1	IV	Yountville	2014
4.2	V	San Juan Bautista	2014
6.0	VIII	South Napa	2014
4..0	IV	Centeral California	2010
4.3	V	Northern California	2009
5.5	VI	San Francisco Bay area	2007
4.2	V	Centeral California	2007
4.2	V	San Francisco Bay area	2007
4.5	V	Northern California	2006
4.3	VI	Northern California	2006
4.7	V	Northern California	2006
4.1	III	Northern California	2005
4.3	V	Centeral California	2004
4.0	V	San Francisco Bay	2003

MAGNITUDE	INTENSITY	LOCATION	YEAR
4.1	IV	Dublin	2003
4.6	V	Channel Islands Beach	2002
5.0	VII	Napa	2000
6.9	IX	Loma Prieta (San Andreas)	1989
5.4	N/A	Santa Cruz County	1989
6.2	N/A	Morgan Hill	1984
5.8, 5.8	VII	Livermore	1980
5.7	N/A	Coyote Lake	1979
5.7, 5.6	N/A	Santa Rosa	1969
5.3, 4.2	N/A	Daly City	1957
5.4	N/A	Concord	1954
6.5	N/A	Calaveras fault	1911
7.9	IX	San Francisco	1906
6.8	N/A	Mendocino	1898
6.2	N/A	Mare Island	1898
6.3	N/A	Calaveras fault	1893
6.2	VIII	Winters	1892
6.4	N/A	Vacaville	1892
6.8	VII	Hayward	1868
6.5	VIII	Santa Cruz Mountains	1865
6.8	N/A	San Francisco Peninsula	1838

SOURCE: UNITED STATE GEOLOGICAL SURVEY, 2019.

The City of Milpitas could also be subject to major earthquakes along currently inactive or unrecognized faults. Two examples in California include the 1983 Coalinga Quake (6.5 magnitude) and the 1994 Northridge Quake (6.7 magnitude), which was an unknown fault, and a "blind" thrust fault over 10 miles below the surface, respectively.

FAULTS

Faults are classified as Historic, Holocene, Late Quaternary, Quaternary, and Pre-Quaternary according to the age of most recent movement (California Geological Survey, 2002). These classifications are described as follows:

- **Historic:** faults on which surface displacement has occurred within the past 200 years;
- **Holocene:** shows evidence of fault displacement within the past 11,000 years, but without historic record;
- **Late Quaternary:** shows evidence of fault displacement within the past 700,000 years, but may be younger due to a lack of overlying deposits that enable more accurate age estimates;
- **Quaternary:** shows evidence of displacement sometime during the past 1.6 million years; and
- **Pre-Quaternary:** without recognized displacement during the past 1.6 million years.

Faults are further distinguished as active, potentially active, or inactive. (California Geological Survey, 2002).

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between about 1.6 million and 11,000 years ago; and
- **Inactive:** An inactive fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not, rupture.

There are two known active or potentially active faults located within the Planning Area: the Arroyo Aguague Fault and the Hayward Fault. Additionally, there are numerous active faults located in the regional vicinity of Milpitas. Figure 3.6-1 illustrates the location of some of the closest faults. Below is a brief summary of the most notable faults in the regional vicinity:

- **Arroyo Aguague Fault**: The Arroyo Aguague fault, which is located in the eastern portion of the City's SOI, was previously considered active and was zoned under the Alquist-Priolo Act as potentially capable of surface rupture. However, studies over the past few decades have indicated that the Arroyo Aguague fault is not active and does not pose a surface-faulting hazard. The fault is no longer zoned by the State of California as an earthquake fault zone under the Alquist-Priolo Act.
- **Calaveras Fault:** The 75-mile-long Calaveras fault represents a significant seismic source in the southern and eastern San Francisco Bay region. It extends from an intersection with the Paicines fault south of Hollister, through the Diablo Range east of San Jose, and along the Pleasanton-Dublin-San Ramon urban corridor. The fault consists of three major sections: the southern Calaveras fault (from the Paicines fault to San Felipe Lake), the central Calaveras fault (from San Felipe Lake to Calaveras Reservoir), and the northern Calaveras fault (from Calaveras Reservoir to Danville). The level of contemporary seismicity along the southern section is low to moderate, whereas the central section has generated numerous moderate earthquakes in historic time. The northern section has a relatively low level of seismicity and may be locked. Paleoseismologic studies suggest a recurrence interval for large ruptures of between 250 and 850 years on the northern fault section. The timing of the most recent rupture on the northern Calaveras fault is unknown, but is estimated to have occurred several hundred years ago. Seismologic evidence suggests that the southern and central sections may produce earthquakes as large as MWMw 6.2. Geologic and seismologic data suggest that the northern section may produce earthquakes as large as MWMw 7.0. This fault is located approximately 1.3 miles east of the Milpitas SOI.
- **Hayward Fault:** The Hayward fault is approximately 62 miles long and has been divided into two fault segments: a longer southern segment and a shorter northern segment. This structure is considered to be the most likely source of the next major earthquake in the San Francisco Bay Area. A maximum earthquake of MWMw 6.9 has been estimated for both the northern and southern segments of the Hayward fault. This fault crosses the central portion of the City of Milpitas.

- **Silver Creek Fault Zone:** The Silver Creek fault zone is a northwest trending strike-slip fault approximately 25 miles long located in eastern Santa Clara Valley. The Silver Creek Fault does not show a spatial concentration of earthquakes that would indicate activity, in contrast to the Calaveras Fault, where earthquakes are densely concentrated. The pattern of Calaveras earthquakes does suggest influence from the Silver Creek Fault. The fault is no longer zoned by the State of California as an earthquake fault zone under the Alquist-Priolo Act. This fault is located approximately 0.9 miles west of the Milpitas SOI.

SEISMIC HAZARD ZONES

Alquist-Priolo Fault Zones

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch (≈11,000 years). Based on this criterion, the California Geological Survey identifies Earthquake Fault Zones. These Earthquake Fault Zones are identified in Special Publication 42 (SP42), which is updated as new fault data become available. The SP42 lists all counties and cities within California that are affected by designated Earthquake Fault Zones. The Fault Zones are delineated on maps within SP42 (Earthquake Fault Zone Maps).

There is one Alquist-Priolo Earthquake Fault Zone located within the city of Milpitas: the Hayward Fault Zone. There are four other major faults delineated as Alquist-Priolo Fault Zones between 10 and 30 miles from Milpitas (San Gregorio fault, Calaveras fault, Greenville fault, and the San Andreas fault). Figure 3.6-1 illustrates the location of the earthquake fault zones.

Seismic Hazard Zones

The State Seismic Hazards Mapping Act (1990) addresses hazards along active faults. The Northern California counties affected by the Seismic Hazard Zonation Program include Alameda, San Francisco, San Mateo and Santa Clara. The Southern California counties affected by the Program include San Bernardino, Los Angeles, Orange, and Ventura. Seismic hazard zones are currently mapped in Milpitas within the Milpitas quadrangle.

LIQUEFACTION

Liquefaction, which is primarily associated with loose, saturated materials, is most common in areas of sand and silt or on reclaimed lands. Cohesion between the loose materials that comprise the soil may be jeopardized during seismic events and the ground will take on liquid properties. Thus, liquefaction requires specific soil characteristics and seismic shaking.

In collaboration with the USGS Earthquake Hazard Program, the California Geological Survey (CGS) produces Liquefaction Susceptibility Maps and identifies "Zones of Required Investigation" per the State's Seismic Hazard Zonation Program.

The article *Mapping Liquefaction-Induced Ground Failure Potential* (Youd and Perkins, 1978) provides a generalized matrix to demonstrate the relationship between liquefaction potential and depositional landscapes. Table 3.5-4, which is recreated from Youd and Perkins, demonstrates the

general relationship between the nature and age of sediment and the anticipated liquefaction potential.

TABLE 3.6-4: LIQUEFACTION POTENTIAL BASED ON SEDIMENT TYPE AND AGE OF DEPOSIT

SEDIMENT	*SUSCEPTIBILITY BASED ON AGE OF DEPOSITS (YEARS BEFORE PRESENT)*			
	MODERN (< 500)	*HOLOCENE (< 10,000)*	*PLEISTOCENE (< 2 MILLION)*	*PRE-PLEISTOCENE (> 2 MILLION)*
River Channel	Very High	High	Low	Very Low
Flood Plain	High	Moderate	Low	Very Low
Alluvial Fan/Plain	Moderate	Low	Low	Very Low
Lacustrine/Playa	High	Moderate	Low	Very Low
Colluvium	High	Moderate	Low	Very Low
Talus	Low	Low	Very Low	Very Low
Loess	High	High	High	- ? -
Glacial Till	Low	Low	Very Low	Very Low
Tuff	Low	Low	Very Low	Very Low
Tephra	High	High	- ? -	- ? -
Residual Soils	Low	Low	Very Low	Very Low
Sebka	High	Moderate	Low	Very Low
Un-compacted Fill	Very High	NA	NA	NA
Compacted fill	Low	NA	NA	NA

SOURCE: YOUD AND PERKINS, 1978

The CGS Liquefaction Susceptibility Maps and "Zones of Required Investigation" are produced per the State's Seismic Hazard Zonation Program. In Northern California, the areas of high liquefaction potential identified by the CGS are confined to the nine counties comprising the Bay Area, which includes Santa Clara County. Figure 3.6-2 illustrates the liquefaction potential in the vicinity of the Planning Area.

Liquefaction potential in the Planning Area varies from very low to very high. The area designated "very low" potential for liquefaction is located in the hilly area in the eastern portion of City's SOI. Moving to the west, the potential for liquefaction increases to "moderate", "high", and "very high". The area designated "very high" potential for liquefaction is located along Coyote Creek.

STRUCTURAL DAMAGE

Fault Rupture Damage. There are known active faults that have been mapped within the Planning Area, and the potential for structures to be adversely affected by fault rupture is considered to be moderate. The California Geological Survey has established an Alquist-Priolo Earthquake Fault Zone, the Hayward Fault Zone, in the Planning Area.

Ground Shaking Damage. As is the case for most areas within California, the potential for seismic ground shaking in the Planning Area is expected. As a result, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. California's seismic design provisions require enhanced structural

integrity based on several risk parameters with the ultimate objective of protecting the life and safety of building occupants and the public. For large earthquakes, the seismic design standards primarily ensure that the building will not collapse, but some structural and non-structural damage may be expected. Older buildings constructed of unreinforced masonry, including materials such as brick, concrete, and stone, pre-1940 wood frame houses, and pre-1973 tilt-up concrete buildings are particularly susceptible to structural damage from ground shaking. In most cases, these older buildings require retrofit, or they risk significant structural damage during an earthquake.

Liquefaction Damage. The liquefaction potential in the Planning Area varies from "very low" to "high," with the majority of the Planning Area designated "moderate" or "very low." Liquefaction poses a substantial source of hazard to structures and infrastructure located throughout the Planning Area. There are a variety of geotechnical strategies that can be implemented to mitigate the potential for structural damage. These include appropriate foundation design, engineering soils, groundwater management, and the use of special flexible materials for construction.

Landslide and Lateral Spreading Damage. Given the relatively level slopes throughout the majority of the Planning Area, the landslide and lateral spreading potential is very low throughout the valley floor in Milpitas, which is where the majority of existing and future urban development is, and will continue to be located in Milpitas. The landslide and lateral spreading potential increases some in the hilly terrain in the eastern portion of the Planning Area. There are a variety of geotechnical strategies that can be implemented to mitigate the potential for landslide and lateral spreading in this area. These include engineering soils, groundwater management, surface water control, slope reconfiguration, and structural reinforcement if necessary.

OTHER GEOLOGIC HAZARDS

Soils

According to the Natural Resource Conservation Service (2016), there are thirty different soil series located in the Planning Area. Figure 3.6-3 presents a map of the soils located in the Planning Area. Information from the NRCS official soil description for these series is provided below.

- The Urban land-Still complex series of soils consists of well-drained soils with sandy loam and silt loam soil textures. They are found on alluvial fans and floodplains, and have moderately high to high permeability. These soils are found mainly in the eastern portion of the Planning Area, east of Highway 17, and have slopes of 0 to 2%.
- The Urban land-Elpaloalto complex series of soils consists of well-drained soils with clay loam and silty clay loam textures. They are found on alluvial fans and have moderately high permeability. These soils are found mainly in the northeastern and northwestern outer edges of the Planning Area, and have slopes of 0 to 2%.
- The Urban land-Flaskan complex series of soils consists of well-drained soils with sandy loam, sand clay loam, and gravelly sandy clay loam textures. They are found on alluvial fans and have moderately high permeability. These soils make up the majority of the Planning Area and are found mainly in the central and southern portions of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Flaskan sandy clay loam series of soils consist of very deep, well-drained soils that formed in alluvium from mixed rock sources. They are found on alluvial fans and have an available water storage of 14.29 cm. These soils are not prominent but exist in small patches in the in the Eastern Portion of the Planning Area. The slope of this soil series ranges from 5 to 9%.

- The Urbanland-Hangerone complex series of soils consists of poorly-drained soils clay, clay loam, and gravelly loam textures. They are found on basin floors and have moderate available water storage of 16.6 cm. These soils occur in a large band along the western portion of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Urbanland-Embarcadero complex series of soils consists of very poorly drained soils. They are found in basin floors and have an available water storage of 16.82 cm. These soils are in a patch located in between HWY 880 and 680, which run through the western half of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Embarcadero silty clay loam series of soils consists of very poorly drained soils. They are found on basin floors and have an available water storage of 16.84 cm. These soils are located in a very small patch in the northwestern boarder of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Urbanland-Clear Lake complex series of soils consists of very deep, poorly drained soils with clay and silty clay textures. They are found on basin floors alluvial fans and have available water storage of 16.3 cm. These soils are found in the limited amounts in the central and southern portion of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Clear Lake silty clay series of soils consists of poorly-drained soils clay and silty clay textures. They are found on basin floors and alluvial fans and have available water storage of 16.1 cm. These soils are located in a small eastern patch of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Urbanland-Campbell complex series of soils consists of moderately well-drained soils with silt loam, silty clay loam, and silty clay textures. They are found on alluvial fans and have high available water storage of 17.43 inches of available water storage. These soils are located in several large patches in the western half of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Campbell silt loam series of soils consists of very deep, moderately well-drained soils with silt loam, silty clay loam, and silty clay textures. They are found on alluvial fans and basin floors and have available water storage of 17.41 cm. These soils are located in the northwestern corner of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Elder series of soils consists of somewhat excessively drained soils with a fine sandy loam texture. They are found in streams and have high permeability. Within the Planning Area, this series is found mainly adjacent Highway 17, east of the Urban land-Elder complex series and west of the highway. The slope of the soil series ranges from 0 to 2%.

- The Urban land-Elder complex series of soils consists of somewhat excessively drained soils with a fine sandy loam texture. They are found on alluvial fans and in streams and have high

permeability. Within the Planning Area, these soils are found mainly in a strip parallel to Highway 17, extending across most of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Urbanland-Newpark complex series of soils consists of moderately well-drained soils with silty clay loam and fine sandy loam textures. They are found on alluvial fans and have available water storage of 19.33 cm. These soils are prevalent in the southwestern portion of the Planning Area. The slope of this soil series ranges from 0 to 2%.

- The Alo-Altamont complex series of soils consists of well-drained soils with clay, clay loam and silty clay textures. They are found on the backslope of hillsides and have about 14.5 cm of available water storage. These soils make up a large portion of the Planning Area and are found mainly in the central and eastern portions of the Planning Area. The slope of this soil series ranges from 15 to 50%.

- The Sehorn-Altamont complex series of soils consists of well-drained soils with silty clay and gravelly silty clay textures. They are found on the side slopes of hills and have low available water capacity. These soils are present along the northern edge of the planning area. The slope of this soil series ranges from 30 to 50%.

- The Kawenga-Alo complex series of soils consists of well-drained soils with fine-loamy textures. They are found on the backslope of hillsides and have 14.58 cm of available water storage. These soils are present in the southeastern portion of the Planning Area. The slope of this soil series ranges from 20 to 40%.

- The Cropley clay series of soils consists of moderately well-drained soils with clay and silty clay loam textures. They are found on alluvial fans, terraces, and hill slopes and have 15 cm of available water storage. These soils are present in small patches in the eastern half of the Planning Area. The slope of this soil series ranges from 2 to 9%.

- The Urban land-Cropley complex series of soils consists of very deep, well-drained soils with clay and sandy clay loam textures. They are found on alluvial fans and toe slopes have 15 cm of available water storage. These soils are found in abundance in the central portion of the Planning Area. The slope of this soil series ranges from 0 to 9%.

- The Argixerolls series of soils consists of well-drained soils with subangular gravel texture. They are found on the back slopes of hills and have an available water storage of 15.55 cm. These soils are present along Arroyo De Los Coches Creek and the Berryessa Creek in the southeastern portion of the Planning Area. The slope of this soil series ranges from 20 to 50%.

- The Kawenga-Lodo complex series of soils consists of well-drained soils with fine-loamy texture. They are found on alluvial fans and an available water storage of 10.58 cm. These soils are present in the northeastern section of the Planning Area. The slope of this soil series ranges from 15 to 30%.

- The Lodo-Rock outcrop complex series of soils consists of well-drained soils with a clay loam texture. They are found on the back slopes of mountains and have an available water storage of 6.57 cm. These soils are present along the northwestern section of the Planning Area. The slope of this soil series ranges from 50 to 75%.

- The Gaviota loam series of soils consists of well-drained soils with a gravelly loam texture. They are found on the back slopes of mountains and have 7.22 cm of available water storage. Graviota loam exists along the southeastern boarder of the Planning area. Graviota rocky sandy loam and Graviota gravelly loam are present in small patches on the northern border of the planning Area. The slope of this soil series ranges from 15 to 30%.

- The Gaviota-Los Gatos complex series of soils consists of well-drained soils with a loamy to fine-loamy texture. They are found on the back slopes of mountains and ridges and have 9.49 cm of available water storage. These soils are present in a very quantity in the northeastern section of the Planning Area. The slope of this soil series ranges from 30 to 50%.

- The Los Gatos-Gaviota complex series of soils consists of well-drained soils with a fine-loamy texture. They are found on mountain back slopes and have 11.8 cm of available water storage. These soils are found on the northeastern edge of the Planning Area. The slope of this soil series ranges from 50 to 75%.

- The Los Osos clay loam series of soils consists of well-drained soils with clay and clay loam textures. They are found on inland hills and mountains and have moderate water capacity. These soils are located in the southeastern section of the Planning Area. The slope of this soil series ranges from 30 to 50%.

- The Los Gatos-Los Osos complex series of soils consists of deep, well-drained and a loamy texture. They are found on alluvial fans These soils are located on the northeastern boarder of the Planning Area. The slope of this soil series ranges from 45 to 75%.

- The Los Osos series of soils consists of moderately deep, well-drained soils with loam, silt loam, and clay loam textures. They are found on uplands and have slow permeability. These soils are found in a small patch in the northeastern section of the Planning Area. The slope of this soil series ranges from 5 to 75%.

- The Millsholm series of soils consists of well-drained soils formed in material weathered from sandstone, mudstone, and shale. They are found on hills and mountains and have moderate permeability. These soils are found in small quantities in the northeastern section of the Planning Area. The slope of this soil series ranges from 5 to 75%.

- The San Andreas loam series of soils consists of well-drained soils formed in material weathered from soft sandstone. They are found on hills and mountainous uplands and have moderately rapid permeability. These soils Are prevalent in the northeastern section of the Planning Area. The slope of this soil series ranges from 9 to 75%.

- The San Ysidro series of soils consists of deep, moderately well-drained soils formed in alluvial from sedimentary rocks. They are found on old, low terraces and have very slow permeability. These soils are found in a small patch in the northeastern portion of the Planning Area. The slope of this soil series ranges from 0 to 9%.

Erosion

The U.S. Natural Resource Conservation Service (NRCS) delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of erosion factors is provided by the NRCS Physical Properties Descriptions:

- Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Erosion factor Kf indicates the erodibiity of the fine soils. The estimates are modified by the presence of rock fragments.

Soil erosion data for the city of Milpitas were obtained from the NRCS. As identified in Table 3.6-5, the erosion factor Kf varies from 0.17 to 0.43, which is considered moderately low to moderate potential for erosion. The NRCS does not provide erosion factors for the Urban land soils in the city of Milpitas. The erosion potential for the Urban land soils in the city is considered to be low.

TABLE 3.6-5: SOIL EROSION FACTORS

Map Symbol and Soil Name	Kf	Representative Value			Acreage
		% Sand	% Silt	% Clay	
102: Urban land	--	--	--	--	290.35
115: Pits, mine	--	--	--	--	190.26
130: Urban land-Still complex	--	--	--	--	163.73
131: Urban land-Elpaloalto complex	--	--	--	--	52.77
140/141: Urban land-Flaskan complex	--	--	--	--	346.89
143: Flaskan sandy clay loam	0.24	58.2	17.8	24.0	6.82
145: Urbanland-Hangerone complex	--	--	--	--	107.62
150: Urbanland-Embarcadero complex	--	--	--	--	1,237.95
151: Embarcadero silty clay loam, drained	0.24	30.3	30.7	39.0	3.64
160: Urbanland-Clear Lake complex	--	--	--	--	299.60
161: Clear Lake silty clay	0.28	8.0	47.0	45.0	4.98
165: Urbanland-Campbell complex	--	--	--	--	1.23
166: Campbell silt loam	0.37	7.0	69.0	24.0	144.24
168/171: Elder fine sandy loam	--	--	--	--	32.12
169: Urbanland-Elder complex	--	--	--	--	894.98
180: Urbanland-Newpark complex	--	--	--	--	4.92
305/306: Alo-Altamont complex	0.17	26.1	28.9	45.0	49.68
305scl: Sehorn-Altamont complex	0.17	26.1	28.9	45.0	0.51
307: Kawenga-Alo complex	0.24	67.7	14.3	18.0	94.39
316: Cropley clay	0.24	26.1	28.9	45.0	395.64
317/318: Urban land-Cropley complex	--	--	--	--	0.02
345: Argixerolls, 20 to 50 percent slopes	0.32	26.1	41.9	32.0	91.56
391/392scl: Lodo-Rock outcrop complex	0.32	68.0	16.0	16.0	792.73

Map Symbol and Soil Name	Kf	Representative Value			Acreage
		% Sand	% Silt	% Clay	
401/GcE: Gaviota loam	0.43	44.8	41.2	14.0	1.13
GaE2aa: Gaviota rocky sandy loam	0.24	66.8	19.2	14.0	1,837.96
GhG2/GhG3: Gaviota gravelly loam	0.43	44.8	41.2	14.0	5.70
GmF: Gaviota-Los Gatos complex	0.43	44.8	41.2	14.0	376.00
LhG: Los Gatos-Gaviota complex	0.24	39.2	37.3	23.5	1,110.54
LoE/LoF/LoG: Los Osos clay loam	0.28	35.0	30.0	35.0	346.50
LpF2aa: Los Gatos-Los Osos complex	0.37	39.8	49.0	31.0	1,700.70
LsCaa: Los Osos loam	0.32	39.2	37.3	23.5	6.13
MhE2aa: Millsholm silt loam	0.49	24.5	52.0	23.5	285.86
SaE2/SaG2: San Andreas fine sandy loam	0.17	66.9	20.1	13.0	144.77
SfC: San Ysidro loam	0.32	39.2	37.3	23.5	146.74
W: Water	--	--	--	--	286.67

SOURCE: NATURAL RESOURCE CONSERVATION SERVICE, 2016.

Expansive Soils

The NRCS delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of linear extensibility (also known as shrink-swell potential or expansive potential) is provided by the NRCS Physical Properties Descriptions:

> *"Linear extensibility" refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.*
>
> *The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.*

The linear extensibility of the soils within Milpitas ranges from Low to Very High. Figure 3.6-4 illustrates the shrink-swell potential of soils in the Planning Area. The majority of the Planning Area has moderate to very high expansive soils, including most of the developed land. The eastern and western portions of the SOI have low expansive soils. Most of the area within the City's SOI with low expansive soils are located on undeveloped land. The areas with moderate to high expansive soils would require special design considerations due to shrink-swell potentials.

Landslide

The California Geological Survey classifies landslides with a two-part designation based on Varnes (1978) and Cruden and Varnes (1996). The designation captures both the type of material that failed

and the type of movement that the failed material exhibited. Material types are broadly categorized as either rock or soil, or a combination of the two for complex movements. Landslide movements are categorized as falls, topples, spreads, slides, or flows.

Landslide potential is influenced by physical factors, such as slope, soil, vegetation, and precipitation. Landslides require a slope, and can occur naturally from seismic activity, excessive saturation, and wildfires, or from human-made conditions such as construction disturbance, vegetation removal, wildfires, etc.

Within Santa Clara County, the hillsides have some susceptibility for landslides, while the valleys have a low susceptibility. Figure 3.6-5 illustrates the landslide potential in the vicinity of the Planning Area. Given the relatively level slopes throughout Milpitas, the landslide potential is low. However, the landslide potential increases in the eastern portion of the Planning Area, which contains areas with elevation change.

Lateral Spreading

Lateral spreading generally is a phenomenon where blocks of intact, non-liquefied soil move down slope on a liquefied substrate of large areal extent. The potential for lateral spreading is present where open banks and unsupported cut slopes provide a free face (unsupported vertical slope face). Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. The greatest potential for lateral spreading in the Planning Area is in the hilly terrain to the east.

Subsidence

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. In Santa Clara County, subsidence has occurred over much of the Santa Clara Valley, including land adjacent to the southern end of the San Francisco Bay.

Land uplift and subsidence in the Santa Clara Valley due to the recharge and withdrawal of fluids is well documented by several public agencies such as the Santa Clara Valley Water District (SCVWD) and the USGS.[1] An increase in the withdrawal of water from the aquifer and a decrease in rainfall for the first half of the twentieth century resulted in a substantial drop in well levels and a corresponding land subsidence of approximately four meters. Recovery efforts over the past quarter century, such as the import of water from outside sources and the construction of percolation ponds, have allowed water levels to partially recover.

[1] Schmidt, D., Bürgmann, R. 2002. Land Uplift and Subsidence in the Santa Clara Valley. Berkeley Seismological Laboratory. Accessed July 20, 2016. Available at: <https://seismo.berkeley.edu/annual_report/ar01_02/node26.html>.

Corrosivity

Corrosivity refers to potential soil-induced electrochemical or chemical action that could corrode or deteriorate concrete, reinforcing steel in concrete structures, and bare-metal structures exposed to these soils. The rate of corrosion is related to factors such as soil moisture, particle-size distribution, and the chemical composition and electrical conductivity of the soil. The natural soils found in the Planning Area may be low to moderately corrosive. The materials used in the construction of modern infrastructure is typically designed to resist the effects of corrosion over the design life of the infrastructure. In addition, native soils are typically replaced by engineered backfill which generally has a low corrosive potential.

Naturally Occurring Asbestos

The term "asbestos" is used to describe a variety of fibrous minerals that, when airborne, can result in serious human health effects. Naturally occurring asbestos is commonly associated with ultramafic rocks and serpentinite. Ultramafic rocks, such as dunite, peridotite, and pyroxenite are igneous rocks comprised largely of iron-magnesium minerals. As they are intrusive in nature, these rocks often undergo metamorphosis, prior to their being exposed on the Earth's surface. The metamorphic rock serpentinite is a common product of the alteration process. Naturally occurring asbestos is mapped in Santa Clara County, although it is all located outside of the Planning Area in mountainous areas as well as south of the Planning Area in San Jose. There is no naturally occurring asbestos mapped within Milpitas.

Tsunami/Seiches

Tsunamis and seiches are standing waves that occur in the ocean or relatively large, enclosed bodies of water (i.e., Lake Tahoe) that can follow seismic, landslide, and other events from local sources (California, Oregon, Washington coast) or distant sources (Pacific Rim, South American Coast, Alaska/Canadian coast). The city of Milpitas is not within a tsunami or seiche hazard area.

Tsunami hazards for the Santa Clara County coastline have been modeled by the California Emergency Management Agency (Cal EMA) to identify areas at risk for tsunami inundation. Multiple source events were selected to represent local and distant earthquakes, and hypothetical extreme undersea, near-shore landslides occurring around the San Francisco Bay region. As defined by the Tsunami Inundation Map for Emergency Planning Milpitas Quadrangle dated July 31, 2009, a tsunami hazard area is located approximately 2.3 miles west of the western city limits.

PALEONTOLOGICAL RESOURCES

Among the natural resources deserving conservation and preservation, and existing within the update Study Area, are the often unseen records of past life buried in the sediments and rocks below the pavement, buildings, soils, and vegetation which now cover most of the area. These records – fossils and their geologic context – undoubtedly exist in large quantities below the surface in many areas in and near the City of Milpitas, and span millions of years in age of origin. Fossils constitute a non-renewable resource: Once lost or destroyed, the exact information they contained can never be reproduced.

Paleontology is the science that attempts to unravel the meaning of these fossils in terms of the organisms they represent, the ages and geographic distribution of those organisms, how they interacted in ancient ecosystems and responded to past climatic changes, and the changes through time of all of these aspects.

The sensitivity of a given area or body of sediment with respect to paleontologic resources is a function of both the potential for the existence of fossils and the predicted significance of any fossils which may be found there. The primary consideration in the determination of paleontologic sensitivity of a given area, body of sediment, or rock formation is its potential to include fossils. Information that can contribute to assessment of this potential includes: 1) direct observation of fossils within the project area; 2) the existence of known fossil localities or documented absence of fossils in the same geologic unit (e.g., "Formation" or one of its subunits); 3) descriptive nature of sedimentary deposits (such as size of included particles or clasts, color, and bedding type) in the area of interest compared with those of similar deposits known elsewhere to favor or disfavor inclusion of fossils; and 4) interpretation of sediment details and known geologic history of the sedimentary body of interest in terms of the ancient environments in which they were deposited, followed by assessment of the favorability of those environments for the preservation of fossils.

The most general paleontological information can be obtained from geologic maps, but geologic cross sections (i.e., slices of the layer cake to view the third dimension) must be reviewed for each area in question. These usually accompany geologic maps or technical reports. Once it can be determined which formations may be present in the subsurface, the question of presence of paleontological resources must be addressed. Even though a formation is known to contain fossils, they are not usually distributed uniformly throughout the many square miles the formation may cover. If the fossils were part of a bay environment when they died, perhaps a scattered layer of shells will be preserved over large areas. If on the other hand, a whale died in this bay, one might expect to find fossil whalebone only in one small area of less than a few hundred square feet. Other resources to be considered in the determination of paleontological potential are regional geologic reports, site records on file with paleontological repositories, and site-specific field surveys.

Paleontologists consider all vertebrate fossils to be of significance. Fossils of other types are considered significant if they represent a new record, new species, an oldest occurring species, the most complete specimen of its kind, a rare species worldwide, or a species helpful in the dating of formations. However, even a previously designated low potential site may yield significant fossils.

3.6.2 REGULATORY SETTING

FEDERAL REGULATIONS

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 (42 USC, 7701 et seq.) requires the establishment and maintenance of an earthquake hazards reduction program by the Federal government.

Executive Order 12699

Signed in January 1990, this executive order of the President implements provisions of the Earthquake Hazards Reduction Act for "federal, federally assisted or federally regulated new building construction" and requires the development and implementation of seismic safety programs by Federal agencies.

International Building Code (IBC)

The purpose of the International Building Code (IBC) is to provide minimum standards to preserve the public peace, health, and safety by regulating the design, construction, quality of materials, certain equipment, location, grading, use, occupancy, and maintenance of all buildings and structures. IBC standards address foundation design, shear wall strength, and other structurally related conditions.

STATE REGULATIONS

California Building Standards Code

Title 24 of the California Code of Regulations, known as the California Building Standards Code (CBSC) or simply "Title 24," contains the regulations that govern the construction of buildings in California. The CBSC includes 12 parts: California Building Standards Administrative Code, California Building Code, California Residential Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Historical Building Code, California Fire Code, California Existing Building Code, California Green Building Standards Code (CAL Green Code), and the California Reference Standards Code. Through the CBSC, the State provides a minimum standard for building design and construction. The CBSC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

California Health and Safety Code

Section 19100 et seq. of the California Health and Safety Code establishes the State's regulations for earthquake protection. This section of the code requires structural designs to be capable of resisting likely stresses produced by phenomena such as strong winds and earthquakes.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 sets forth the policies and criteria of the State Mining and Geology Board, which governs the exercise of governments' responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones, as delineated on maps officially issued by the State Geologist. Working definitions include:

- Fault – a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side;
- Fault Zone – a zone of related faults, which commonly are braided and sub parallel, but may be branching and divergent. A fault zone has a significant width (with respect to the scale at which the fault is being considered, portrayed, or investigated), ranging from a few feet to several miles;
- Sufficiently Active Fault – a fault that has evidence of Holocene surface displacement along one or more of its segments or branches (last 11,000 years); and
- Well-Defined Fault – a fault whose trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The geologist should be able to locate the fault in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

"Sufficiently Active" and "Well Defined" are the two criteria used by the State to determine if a fault should be zoned under the Alquist-Priolo Act.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically-induced landslides. Under the Act, seismic hazard zones are to be mapped by the State Geologist to assist local governments in land use planning. The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act (which addresses only surface fault-rupture hazards) and are outlined below:

The State Geologist is required to delineate the various "seismic hazard zones."

- Cities and counties, or other local permitting authority, must regulate certain development "projects" within the zones. They must withhold the development permits for a site within a zone until the geologic and soil conditions of the site are investigated and appropriate mitigation measures, if any, are incorporated into development plans.
- The State Mining and Geology Board provides additional regulations, policies, and criteria to guide cities and counties in their implementation of the law. The Board also provides guidelines for preparation of the Seismic Hazard Zone Maps and for evaluating and mitigating seismic hazards.
- Sellers (and their agents) of real property within a mapped hazard zone must disclose that the property lies within such a zone at the time of sale.

Caltrans Seismic Design Criteria

The California Department of Transportation (Caltrans) has Seismic Design Criteria (SDC), which is an encyclopedia of new and currently practiced seismic design and analysis methodologies for the design of new bridges in California. The SDC adopts a performance-based approach specifying minimum levels of structural system performance, component performance, analysis, and design practices for ordinary standard bridges. The SDC has been developed with input from the Caltrans Offices of Structure Design, Earthquake Engineering and Design Support, and Materials and Foundations. Memo 20-1 Seismic Design Methodology (Caltrans 1999) outlines the bridge category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components, and seismic design practices that collectively make up Caltrans' seismic design.

Division of Mines and Geology

The California Division of Mines and Geology (DMG) operates within the Department of Conservation. The DMG is responsible for assisting in the utilization of mineral deposits and the identification of geological hazards.

State Geological Survey

Similar to the DMG, the California Geological Survey is responsible for assisting in the identification and proper utilization of mineral deposits, as well as the identification of fault locations and other geological hazards.

LOCAL

Milpitas Municipal Code Title II Building Regulations

Title 11, Building Regulations, of the City of Milpitas Municipal code includes the standards and regulations for septic tanks within the City of Milpitas. The title states where a sewage disposal system exists it shall be pumped and filled with earth or sand in accordance with State, County and City Health Department requirements.

3.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on geology and soils if it will:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction; or
    - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: General Plan implementation has the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides (Less than Significant)

There are known active faults that have been mapped within the Planning Area and numerous faults located in the region as illustrated in Figure 3.6-1. In addition, the California Geological Survey has established an Alquist-Priolo Earthquake Fault Zone, the Hayward Fault Zone, which traverses the Planning Area. While there are known active faults mapped within the City, the area could experience considerable ground shaking generated by faults within the Planning Area. For example, Milpitas could experience an intensity of MM VII generated by seismic events occurring along the Hayward fault. The effect of this intensity level could destroy some building, foundations, and bridges. As a result, future development in the City of Milpitas may expose people or structures to

potential adverse effects associated with a seismic event, including strong ground shaking and seismic-related ground failure.

Additionally, as noted previously, the State Seismic Hazards Mapping Act (1990) addresses hazards along active faults. Seismic hazard zones are currently mapped in Milpitas and include areas mapped for liquefaction and earthquake induced landslide hazards. The most prominent areas of the City susceptible to liquefaction are located along Coyote Creek.

All projects would be required to comply with the provisions of the CBSC, which requires development projects to: perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues, and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. Subsequent development and infrastructure would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with seismic activity.

The General Plan policies and actions listed below require review of development proposals to ensure compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. All development and construction proposals must be reviewed by the City to ensure that all new development and construction is in conformance with applicable building standards related to geologic and seismic safety. All future projects are subject to CEQA review to address seismic safety issues and provide site specific mitigation for existing and potential hazards identified. With the implementation of the policies and actions in the General Plan, as well as applicable State and City codes, potential impacts associated with a seismic event, including rupture of an earthquake fault, seismic ground shaking, liquefaction, and landslides would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA 1-1: Require development to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and unstable soil conditions.

Policy SA 1-2: Ensure that all new development and construction is in conformance with all applicable building standards related to geologic and seismic safety.

Policy SA 1-3: Require geotechnical investigations to be completed prior to approval of any public safety or other critical facilities, in order to ensure that these facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards.

Policy SA 1-4: Development in areas subject to unstable soil and/or geologic conditions shall be reviewed by qualified engineers and or geologists prior to development in order to ensure the safety and stability of all new construction.

Policy SA 1-5: Require an erosion and sediment control plan prepared by a civil engineer, or other professional who is qualified to prepare such a plan, as part of any grading permit application for new development. The erosion and sediment control plan shall delineate measures to appropriately and effectively minimize soil erosion and sedimentation.

Policy SA 1-6: All structures and building foundations requiring a building permit located within areas containing expansive soils, or other soils conditions which, if not corrected, would lead to structural defects, or unsafe conditions, shall be reviewed by a qualified engineer, who shall recommend corrective actions as appropriate to remedy onsite soil conditions.

Policy SA 1-7: All structures and additions requiring a building permit shall be designed and engineered to comply with the most current version of the California Code of Regulations (CCR), Title 24.

Policy SA 1-8: Where alterations such as grading and tree or vegetation removal are made to hillside sites rendering slopes unstable, planting of vegetation or other engineering means shall be required.

Policy SA 1-9: The use of drought-tolerant plants for landscaping in hillside areas shall be encouraged as a means to eliminate the need for supplemental watering which may result in increased soil erosion and slope instability.

ACTIONS

Action SA 1a: Require the submission of geologic and soils reports for all new developments. The geologic risk areas that are determined from these studies shall have standards established and recommendations shall be incorporated into development.

Action SA 1b: Require adherence to the requirements of the California Code of Regulations (CCR), Title 24 in all areas of the city during the plan check review process.

Action SA 1c: Require that any facility, or residential structure, that is being increased more than 50 percent of the assessed value or physical size, conform to all provisions of the current building code throughout the entire structure.

Action SA 1d: When a change in natural grade or removal of existing vegetation is necessary, appropriate vegetative cover to stabilize slopes and reduce erosion shall be encouraged. This shall be accomplished through the development and design review process.

Action SA 1e: As applications for building permits to renovate, expand or remodel existing structures greater than 30 years old are received, identify and inspect potentially seismically unsafe buildings and structures, including unreinforced masonry buildings, to ensure that all applicable building code requirements are met.

Action SA 1f: Explore programs and funding sources that would encourage, assist, or provide incentives to property owners to retrofit their buildings for seismic safety, such as the Unreinforced Masonry (URM) program.

Action SA 1g: Periodically review the structural integrity of all existing City-owned critical facilities and, if any facilities are found unsatisfactory, take steps to ensure structural integrity and safety.

Impact 3.6-2: General Plan implementation has the potential to result in substantial soil erosion or the loss of topsoil (Less than Significant)

The General Plan would allow development and improvement projects that would involve some land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters.

As noted previously, because the majority of the city limits contains existing urban uses, the erosion potential is considered to be low. Limited development could occur within the SOI's hillside areas. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other regulations. In addition to compliance with City standards and policies, the Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area of one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The General Plan includes a range of policies and one action related to best management practices, NPDES requirements, and minimizing discharge of materials (including eroded soils) into the storm drain system. With the implementation of the policies and actions in the General Plan, as well as applicable State and City requirements, potential impacts associated with erosion and loss of topsoil would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

See policies and actions identified in impacts 3.6-1

Impact 3.6-3: General Plan implementation has the potential to result in development located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (Less than Significant)

Development allowed under the General Plan could result in the exposure of people and structures to conditions that have the potential for adverse effects associated with ground instability or failure. Soils and geologic conditions in the Milpitas Planning Area have the potential for landslides, lateral spreading, subsidence, liquefaction, or collapse. Each are discussed below:

Landslide: Within Santa Clara County, the hillsides have some susceptibility for landslides, while the valleys have a low susceptibility. Figure 3.6-5 illustrates the landslide potential in the vicinity of the Planning Area. Given the relatively level slopes throughout Milpitas, the landslide potential is low. However, the landslide potential increases in the eastern portion of the Planning Area, which contains areas with greater elevation change.

Lateral Spreading: Lateral spreading generally is a phenomenon where blocks of intact, non-liquefied soil move down slope on a liquefied substrate of large areal extent. The potential for lateral spreading is present where open banks and unsupported cut slopes provide a free face (unsupported vertical slope face). Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes. The greatest potential for lateral spreading in the Planning Area is in the hilly terrain to the east of the city within the hillside portions of the SOI.

Subsidence: In Santa Clara County, subsidence has occurred over much of the Santa Clara Valley, including land adjacent to the southern end of the San Francisco Bay.

Land uplift and subsidence in the Santa Clara Valley due to the recharge and withdrawal of fluids is well documented by several public agencies such as the Santa Clara Valley Water District (SCVWD) and the USGS.[2] An increase in the withdrawal of water from the aquifer and a decrease in rainfall for the first half of the twentieth century resulted in a substantial drop in well levels and a corresponding land subsidence of approximately four meters. Recovery efforts over the past quarter century, such as the import of water from outside sources and the construction of percolation ponds, have allowed water levels to partially recover.

Liquefaction: The CGS Liquefaction Susceptibility Maps and "Zones of Required Investigation" are produced per the State's Seismic Hazard Zonation Program. In Northern California, the areas of high liquefaction potential identified by the CGS are confined to the nine counties comprising the Bay Area, which includes Santa Clara County. Figure 3.6-2 illustrates the liquefaction potential in the vicinity of the Planning Area.

[2] Schmidt, D., Bürgmann, R. 2002. Land Uplift and Subsidence in the Santa Clara Valley. Berkeley Seismological Laboratory. Accessed July 20, 2016. Available at: <https://seismo.berkeley.edu/annual_report/ar01_02/node26.html>.

Liquefaction potential in the Planning Area varies from very low to very high. The area designated "very low" potential for liquefaction is located in the hilly area in the eastern portion of City's SOI. Moving to the west, the potential for liquefaction increases to "moderate", "high", and "very high". The area designated "very high" potential for liquefaction is located along Coyote Creek.

Collapse: Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Existing alluvium within the city may be susceptible to collapse and settlements.

Conclusion: Unstable geologic units could be present within the Planning Area. The potential impacts of such unstable materials could include subsidence where artificial fill material may be poorly engineered and highly compressible. As previously noted, development sites in the Planning Area may be at risk for seismically induced liquefaction, especially in areas that adjoin Coyote Creek. As future development and infrastructure projects are considered by the City of Milpitas, each project will be evaluated for conformance with the CBSC, the General Plan, Zoning Ordinance, and other regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Future development and improvement projects would be required to have a specific geotechnical study prepared and incorporated into the improvement design, consistent with the requirements of the State and City codes. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan includes policies and actions to ensure that development projects address potential geologic hazards, at-risk buildings and infrastructure is evaluated for potential risks, and site-specific studies are completed for area subject to liquefaction. With the implementation of the policies and actions in the General Plan, as well as applicable State and City codes, potential impacts associated with ground instability or failure would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

See policies and actions identified in Impact 3.6-1

Impact 3.6-4: General Plan implementation has the potential to result in development on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property (Less than Significant)

Expansive soil properties can cause substantial damage to building foundations, piles, pavements, underground utilities, and/or other improvements. Structural damage, such as warping and cracking of improvements, and rupture of underground utility lines, may occur if the expansive potential of soils is not considered during the design and construction of all improvements.

Linear extensibility is a method for measuring expansion potential. The expansion potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

The linear extensibility of the soils within Milpitas ranges from Low to Very High. Figure 3.6-4 illustrates the shrink-swell potential of soils in the Planning Area. The majority of the Planning Area has moderate to very high expansive soils, including most of the developed land. The eastern and western portions of the SOI have low expansive soils. Most of the area within the City's SOI with low expansive soils are located on undeveloped land. The areas with moderate to high expansive soils would require special design considerations due to shrink-swell potentials.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBSC, General Plan, Zoning Ordinance, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The Safety Element of the General Plan establishes policies that are designed to protect from geologic hazards, including expansive soils. Consistency with the General Plan policies will require identification of geologic hazards and risk inventory of existing at-risk buildings and infrastructure. As required by the CBSC, a site-specific geotechnical investigation will identify the potential for damage related to expansive soils and non-uniformly compacted fill and engineered fill. If a risk is identified, design criteria and specification options may include removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill material that is designed to withstand the forces exerted during the expected shrink-swell cycles and settlements.

Design criteria and specifications set forth in the design-level geotechnical investigation will ensure impacts from problematic soils are minimized. There are no additional significant adverse environmental impacts, apart from those disclosed in the relevant chapters of this Draft EIR, that are anticipated to occur associated with expansive soils. Therefore, this impact is considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

See policies and actions identified in Impact 3.6-1.

Impact 3.6-5: General Plan implementation does not have the potential to have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water (Less than Significant)

Construction within the city limits allowed by the proposed Plan would not require the use of septic tanks or alternative wastewater disposal systems. Wastewater would be discharged into the existing public sanitary sewer system in the Plan Area, which is serviced by the West Valley Sanitation District (WVSD).

As discussed in Section 3.15 of this DEIR, adequate system capacity is ensured through implementation and periodic auditing of the Sewer System Management Plan (SSMP), as well as sewer related capital improvement program (CIP) projects and studies. New wastewater generated from urban General Plan land uses will be collected and transmitted via sewer and limited use of septic tanks may be required within hillside areas of the Planning Area outside the city limits and within the SOI. As described in the regulatory setting, standards for any septic tanks or alternative waste water disposal systems utilized for development within the planning area would require the county health permit and review. Therefore, this impact is considered **less than significant**.

Impact 3.6-6: General Plan implementation has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (Less than Significant)

DEFINITION OF SIGNIFICANCE FOR PALEONTOLOGICAL RESOURCES

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.
6. All identifiable vertebrate fossils are considered significant due to the rarity of their preservation.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and invertebrate animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important.

There could be fossils of potential scientific significance and other unique geologic features that remain undiscovered or are not recorded. Ground-disturbing construction associated with development allowed under the proposed General Plan could uncover previously unknown resources. Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. Implementation of the proposed General Plan policies and actions would ensure steps would be taken to minimize impacts to paleontological resources in the event that they are discovered during construction and thus, general plan implementation would result in a **less-than-significant** impact relative to this environmental topic.

GENERAL PLAN MINIMIZATION MEASURES

CONSERVATION AND SUSTAINABILITY ELEMENT POLICIES

Policy CON 4-1: Review proposed developments and work in conjunction with the California Historical Resources Information System, Northwest Information Center at Sonoma State University, to determine whether project areas contain known archaeological resources, either prehistoric and/or historic-era, or have the potential for such resources.

Policy CON 4-2: If found during construction, ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

Policy CON 4-3: Work with Native American representatives to identify and appropriately address, through avoidance or mitigation, impacts to Native American cultural resources and sacred sites during the development review process.

Policy *CON 4-4: Consistent with State, local, and tribal intergovernmental consultation requirements such as SB 18 and AB 52, the City shall consult as necessary with Native American tribes that may be interested in proposed new development and land use policy changes.*

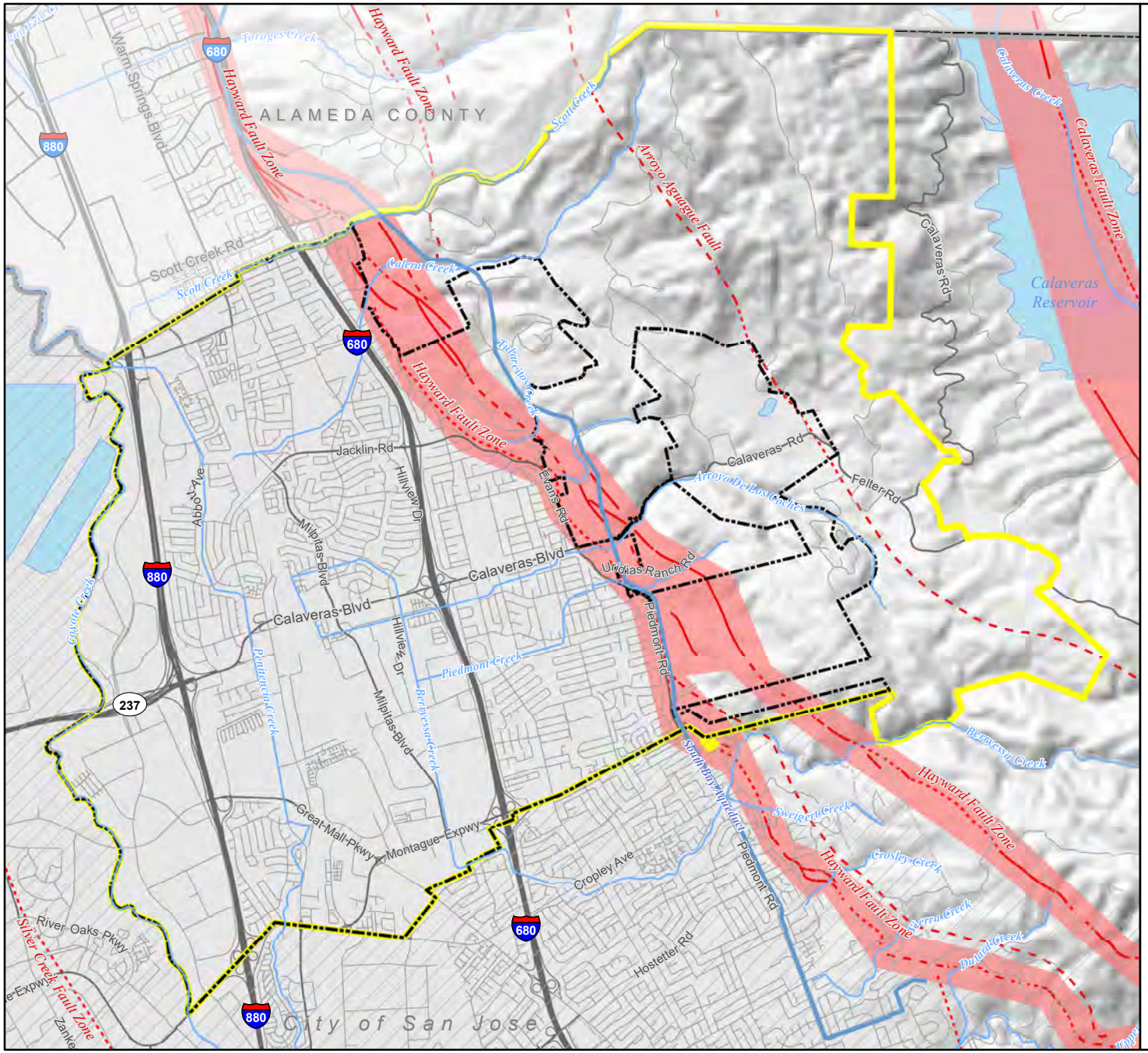
ACTIONS

Action CON 4a: Require a cultural and archaeological survey prior to approval of any project which would require excavation in an area that is sensitive for cultural or archaeological resources. If significant cultural or archaeological resources, including historic and prehistoric resources, are identified, appropriate measures shall be implemented, such as documentation and conservation, to reduce adverse impacts to the resource.

Action CON 4b: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Planning Department shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Planning Department.*

- *If human remains are discovered during any ground disturbing activity, work shall stop until the Planning Department and the County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Planning Department.*



CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.6-1. Earthquake Faults

Quaternary Faults
- Well-constrained
- Moderately-constrained
- Inferred
- Alquist-Priolo Fault Zones

Planning Areas
- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

N

0 ¼ ½
Miles
1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atals; USGS Quaternary fault database; Cal Geology. Map date: June 13, 2016.

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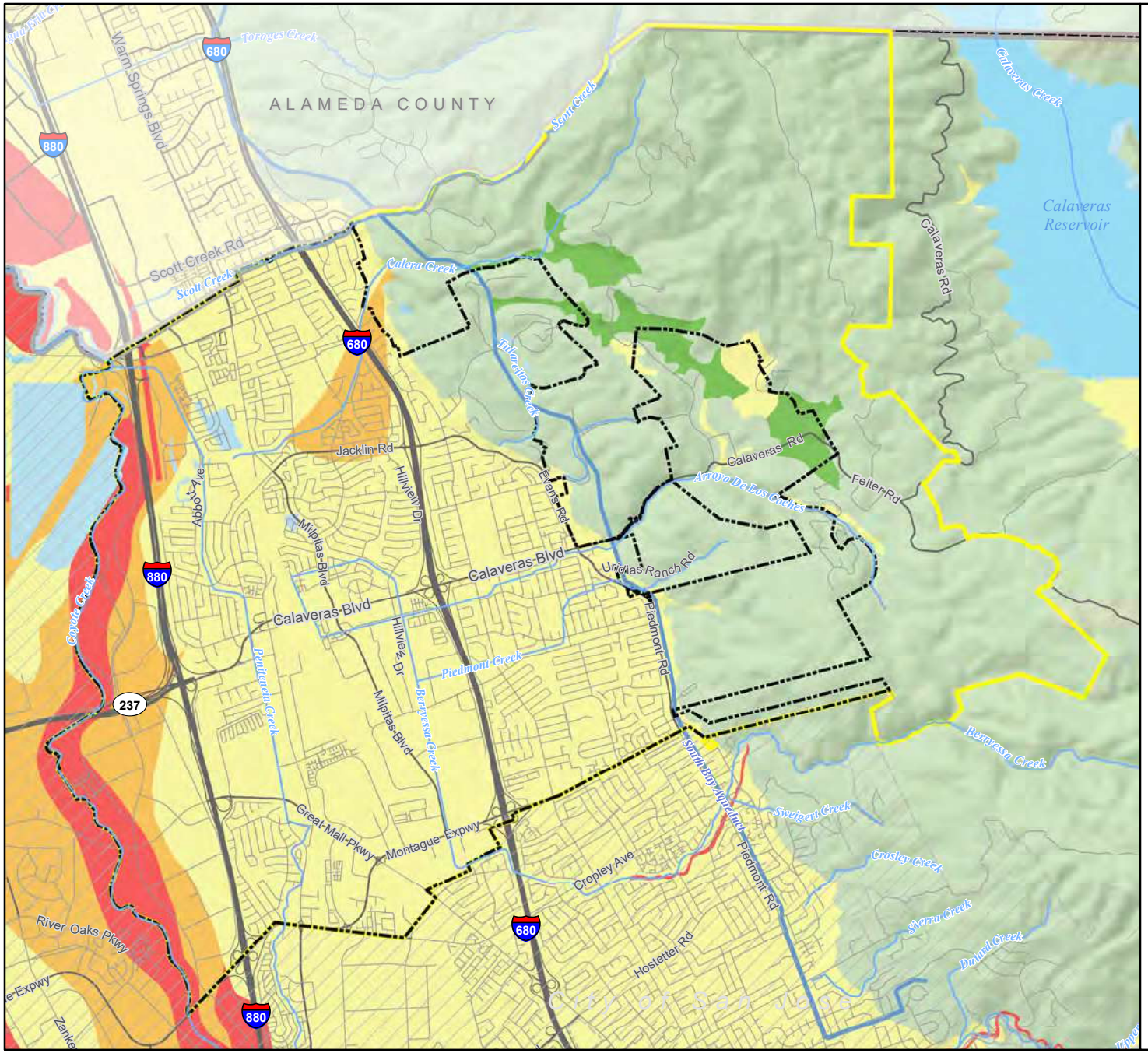

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.6-2. Liquefaction Susceptibility

Liquefaction Susceptibility

- Very Low
- Low
- Moderate
- High
- Very High
- Water

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 ¼ ½
Miles
1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; CalAtlas; U.S. Geological Surve Open-File Report 2006-1037, Version 1.1. Map date: June 10, 2016.

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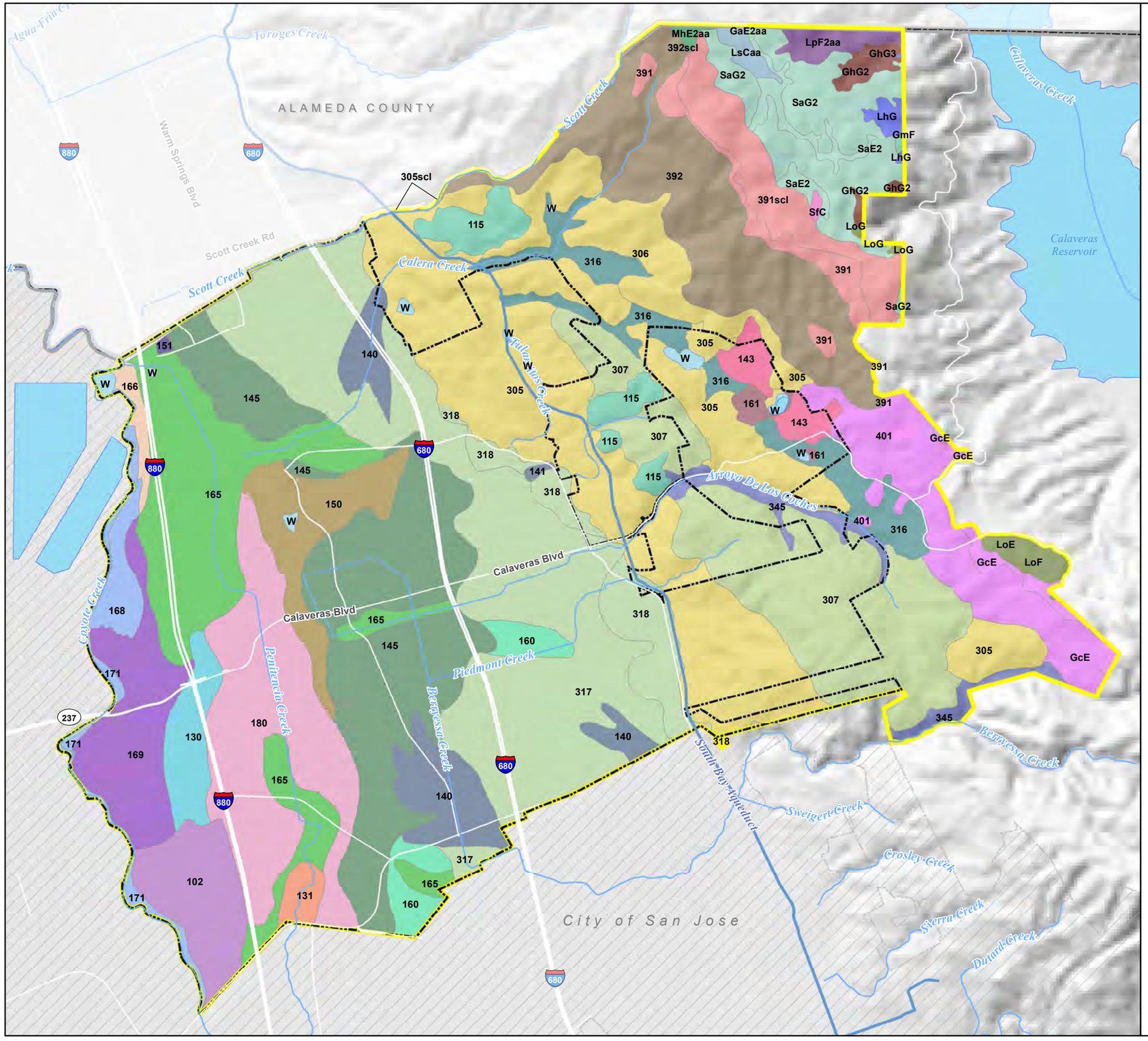

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.6-3. NRCS Soils

NRCS Soil Classification

- 102 - Urban land
- 115 - Pits, mine
- 130 - Urban land-Still complex
- 131 - Urban land-Elpaloalto complex
- 140/141 - Urban land-Flaskan complex
- 143 - Flaskan sandy clay loam
- 145 - Urbanland-Hangerone complex
- 150 - Urbanland-Embarcadero complex
- 151 - Embarcadero silty clay loam, drained
- 160 - Urbanland-Clear Lake complex
- 161 - Clear Lake silty clay
- 165 - Urbanland-Campbell complex
- 166 - Campbell silt loam
- 168/171 - Elder fine sandy loam
- 169 - Urbanland-Elder complex
- 180 - Urbanland-Newpark complex
- 305/306 - Alo-Altamont complex
- 305scl - Sehorn-Altamont complex
- 307 - Kawenga-Alo complex
- 316 - Cropley clay
- 317/318 - Urban land-Cropley complex
- 345 -
- 391/391scl - Kawenga-Lodo complex
- 392/392scl - Lodo-Rock outcrop complex
- 401/GcE - Gaviota loam
- GaE2aa - Gaviota rocky sandy loam
- GhG2/GhG3 - Gaviota gravelly loam
- GmF - Gaviota-Los Gatos complex
- LhG - Los Gatos-Gaviota complex
- LoE/LoF/LoG - Los Osos clay loam
- LpF2aa - Los Gatos-Los Osos complex
- LsCaa - Los Osos loam
- MhE2aa - Millsholm silt loam
- SaE2/SaG2 - San Andreas fine sandy loam
- SfC - San Ysidro loam
- W - Water

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 1,000 2,000
Feet
1:40,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; NRCS Web Soil Survey, Alameda Area (CA609), Alameda County Western Part (CA610), Eastern Santa Clara Area (CA646), Santa Clara Area Western Part (CA641), accessed June 9, 2016. Map date: June 10, 2016.

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CITY OF MILPITAS
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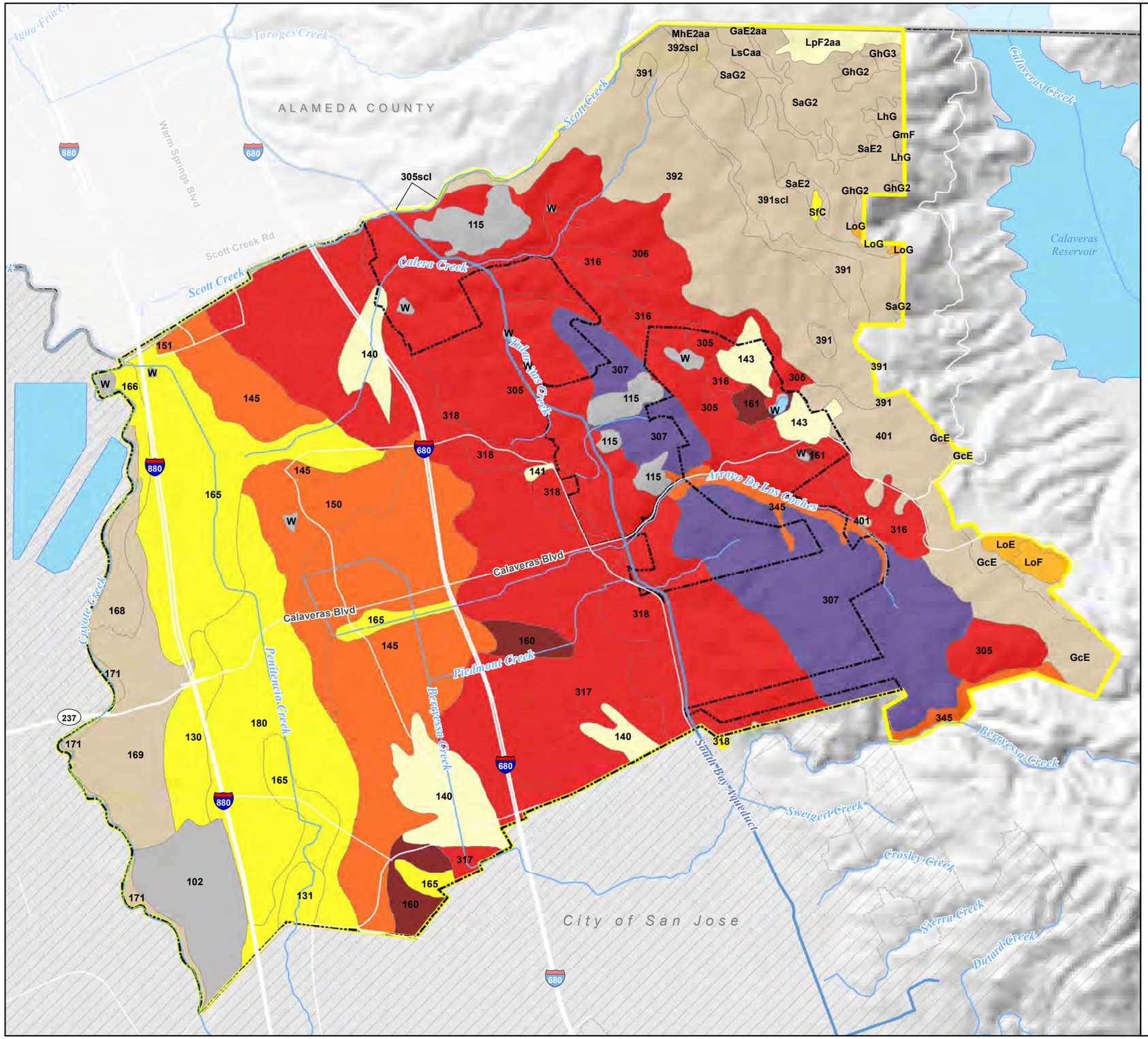
Figure 3.6-4. Shrink-Swell Potential of Soils



Shrink-Swell Potential of Soils*

- L: Low
- L-M: Low to Moderate
- M: Moderate
- M-H: Moderate to High
- H: High
- H-VH: High to Very Hight
- VH: Very High
- L-H: Low to High
- NA: Water, Pits, Mines, or Urban Lands

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

** Shrink-swell potential is determined by the "linear extensibility" of the soil. Linear extenisbility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change and is reported as a percent change for the whole soil. Shrink-swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3-6%; high if 6-9%; and very high if greater than 9%. Many of the soil types within the planning area are complexes, made up of more than one soil type, therefore the shink-swell potential may span multiple categories. The map is labeled by soil type and may be cross-referenced with Figure 5.5-3.*

N

0 1,000 2,000
Feet
1:40,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; NRCS Web Soil Survey, Alameda Area (CA609), Alameda County Western Part (CA610), Eastern Santa Clara Area (CA646), Santa Clara Area Western Part (CA641), accessed June 9, 2016. Map date: June 10, 2016.

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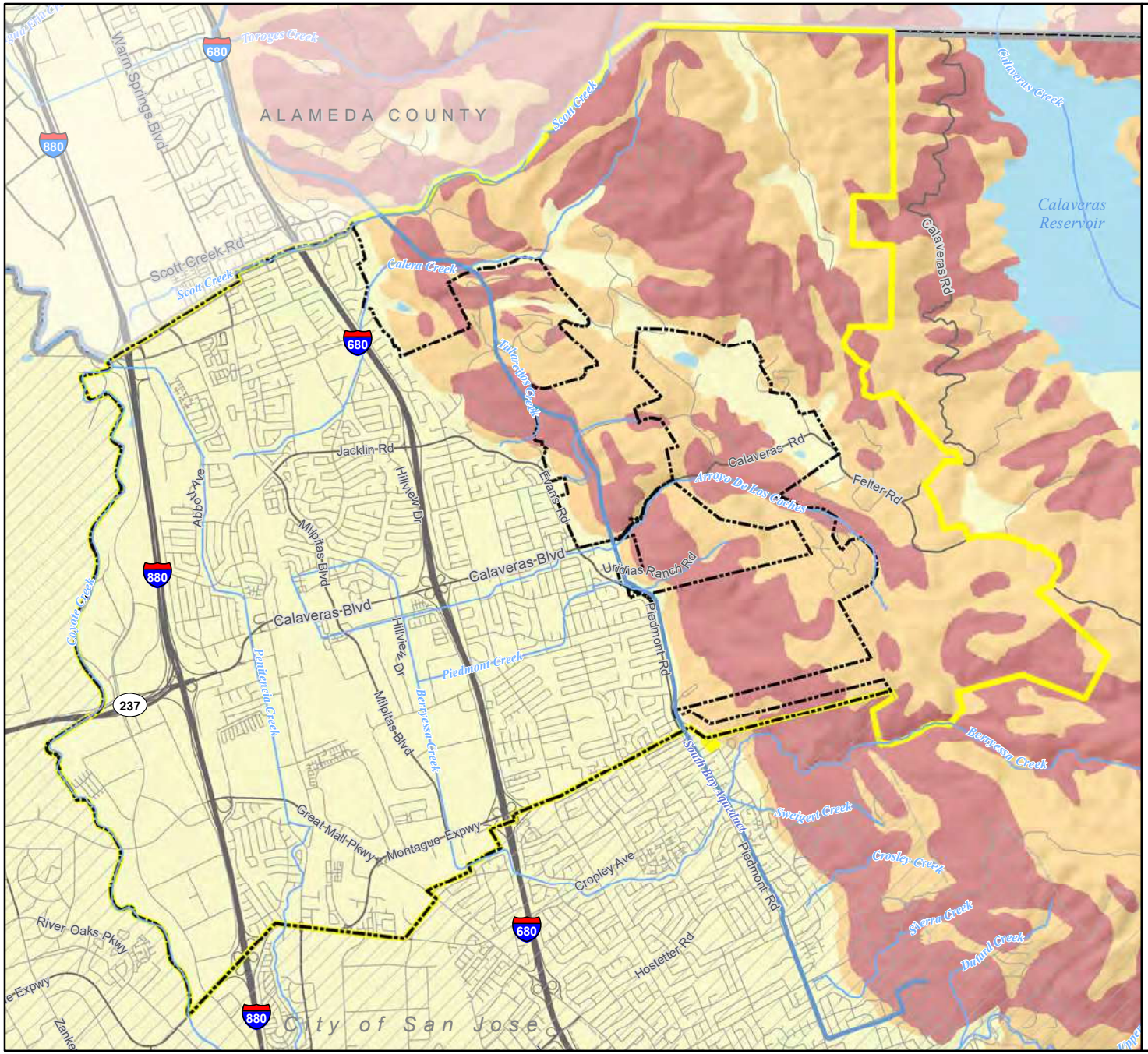

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.6-5. Landslide Potential

Map Units *

- Few Landslides
- Mostly Landslide
- Surficial Deposits (Flat Land)
- Water

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

** The best available predictor of where movement of slides and earth flows might occur is the distribution of past movements (Nilsen and Turner, 1975).*

N

0 ¼ ½

Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atals; U.S. Geological Surve Open-File Report 97-745. Map date: June 10,

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This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from implementation of the General Plan. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change.

This section also provides background discussion on energy use in Milpitas. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis.

The analysis and discussion of the GHG, climate change, and energy conservation impacts in this section focuses on the General Plan's consistency with local, regional, statewide, and federal climate change and energy conservation planning efforts and discusses the context of these planning efforts as they relate to the proposed project.

Emissions of GHGs have the potential to adversely affect the environment in a cumulative context. The emissions from a single project will not cause global climate change; however, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

No comments were received during the NOP comment period pursuant to greenhouse gases, climate change, and/or energy.

3.7.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse

effect. Among the prominent GHGs contributing to the greenhouse effect are CO_2, CH_4, O_3, water vapor, N_2O, and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial sector (California Energy Commission, 2019b).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced approximately 424 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2017 (California Energy Commission, 2019b). To meet the annual statewide targets set by the California Air Resources Board, California emissions need to be below 431 $MMTCO_2e$ by 2020, and to below 260 $MMTCO_2e$ by 2030 (California Air Resources Board, 2017).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2017, accounting for 41% of total GHG emissions in the state. This category was followed by the industrial sector (24%), the electricity generation sector (including both in-state and out of-state sources) (15%), the agriculture and forestry sector (8%), the residential energy consumption sector (7%), and the commercial energy consumption sector (5%) (California Energy Commission, 2019b).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of water supply for the state. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation

could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Environmental Protection Agency, 2010). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. According to the most recent California Climate Change Assessment (*California's Fourth Climate Change Assessment*) (2019), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Wildfires

In recent years, the area burned by wildfires has increased in parallel with increasing air temperatures. Wildfires have also been occurring at higher elevations in the Sierra Nevada mountains, a trend which is expected to continue under future climate change. Climate change will likely modify the vegetation in California, affecting the characteristics of fires on the land. Land use and development patterns also play an important role in future fire activity. Because of these complexities, projecting future wildfires is complicated, and results depend on the time period for the projection and what interacting factors are included in the analysis. Because wildfires are affected by multiple and sometimes complex drivers, projections of wildfire in future decades in California range from modest changes from historical conditions to relatively large increases in wildfire regimes.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. Climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions.

Energy Resources

Higher temperatures will increase annual electricity demand for homes, driven mainly by the increased use of air conditioning units. High demand is projected in inland and Southern California, and more moderate increases are projected in cooler coastal areas. However, the increased annual residential energy demand for electricity is expected to be offset by reduced use of natural gas for space heating. Increases in peak hourly demand during the hot months of the year could be more pronounced than changes in annual demand. This is a critical finding for California's electric system, because generating capacity must match peak electricity demand.

Water Supply

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the state from northern California rivers and the Colorado River. The current distribution system relies

on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major state fresh water supply.

Current management practices for water supply and flood management in California may need to be revised for a changing climate. This is in part because such practices were designed for historical climatic conditions, which are changing and will continue to change during the rest of this century and beyond. As one example, the reduction in the Sierra Nevada snowpack, which provides natural water storage, will have implications throughout California's water management system. Even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Climate change will make forests more susceptible to extreme wildfires. *California's Fourth Climate Change Assessment* found that by 2100, if greenhouse gas emissions continue to rise, the frequency

of extreme wildfires burning over approximately 25,000 acres would increase by nearly 50 percent, and that average area burned statewide would increase by 77 percent by the end of the century. In the areas that have the highest fire risk, wildfire insurance is estimated to see costs rise by 18 percent by 2055 and the fraction of property insured would decrease.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the state. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Climate change could cause the San Francisco Bay to rise 12 to 24 inches by mid-century and by 36 to 66 inches by end-of -century.[1] This means that today's floods will likely be the future's high tides and areas that currently flood every 10 to 20 years could be inundated more frequently.

Statewide damages could reach nearly $17.9 billion from inundation of residential and commercial buildings under 50 centimeters (~20 inches) of sea-level rise, which is close to the 95th percentile of potential sea-level rise by the middle of this century. A 100-year coastal flood, on top of this level of sea-level rise, would almost double the costs.

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Rising sea levels would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are the most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 33% of electricity generated from renewable resources by 2020, and 60 percent by 2030. Additionally, SB 100, which was signed into law in 2018, requires all of the State's electricity to come from carbon-free sources by 2045.

Overall, in 2017, California's per capita energy usage was ranked 48th in the nation (U.S. EIA, 2018). Additionally, California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970's, including new building energy efficiency standards,

[1] Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future, National Research Council 2012 http://www.nap.edu/catalog/13389/sealevel-rise-for-the-coasts-of-california-oregon-and-washington

vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with the operation of passenger, public transit, and commercial vehicles results in GHG emissions that ultimately result in global climate change. Other fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 71 percent of the electrical power needed to meet California's demand is produced in the state. Approximately 29 percent of its electricity is imported from the Pacific Northwest and the Southwest (California Energy Commission, 2019b). In 2010, California's in-state generated electricity was derived from natural gas (53.4 percent), large hydroelectric resources (14.6 percent), coal (1.7 percent), nuclear sources (15.7 percent), and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (14.6 percent) (California Energy Commission, 2019b). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.76 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (California Energy Commission, 2019b). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010. Santa Clara County consumed approximately 16,708 GWh in 2018, roughly 0.6% of the state total.

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2018, world consumption of oil had reached 100 million barrels per day (U.S. EIA, 2019a). The United States, with approximately five percent of the world's population, accounts for approximately 21 percent of world oil consumption, or approximately 20.5 million barrels per day (U.S. EIA, 2019b). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the state's transportation energy needs (California Energy Commission, 2018).

Natural Gas

Natural gas supplies are derived from underground sources and brought to the surface at gas wells. Once it is extracted, gas is purified and the odorant that allows gas leaks to be detected is added to the normally odorless gas. Natural gas suppliers, such as Pacific Gas & Electric Company (PG&E),

then send the gas into transmission pipelines, which are usually buried underground. Compressors propel the gas through the pipeline system, which delivers it to homes and businesses.

The state produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2018). In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2019a). PG&E provides natural gas for residential, industrial, and agency consumers within Santa Clara County, including the City of Milpitas.

3.7.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (USEPA) is responsible for administering the FCAA. The FCAA requires the USEPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the USEPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The USEPA calculates a CAFE value for each manufacturer based on

city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Intermodal Surface Transportation Efficiency Act (ISTEA)

ISTEA (49 U.S.C. § 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations (MPOs), were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

SAFETEA-LU (23 U.S.C. § 507), renewed the Transportation Equity Act for the 21st Century (TEA-21) of 1998 (23 U.S.C.; 49 U.S.C.) through FY 2009. SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety, and transit. SAFETEA-LU addressed the many challenges facing our transportation system today—such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment—as well as laying the groundwork for addressing future challenges. SAFETEA-LU promoted more efficient and effective federal surface transportation programs by focusing on transportation issues of national significance, while giving state and local transportation decision makers more flexibility to solve transportation problems in their communities. SAFETEA-LU

was extended in March of 2010 for nine months, and expired in December of the same year. In June 2012, SAFETEA-LU was replaced by the Moving Ahead for Progress in the 21st Century Act (MAP-21), which took effect October 1, 2012.

U.S. Federal Climate Change Policy

According to the USEPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The federal government's goal is to reduce the greenhouse gas (GHG) intensity (a measurement of GHG emissions per unit of economic activity) of the American economy by 18 percent over the 10-year period from 2002 to 2012. In addition, the EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide USEPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

STATE

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as CEC. The Act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The State's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas

needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 Energy Action Plan II, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

State of California Energy Action Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 1997 California Energy Plan. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces VMT and accommodates pedestrian and bicycle access.

Assembly Bill 1493

In response to AB 1493, the CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961), and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

The CARB requested a waiver of federal preemption of California's Greenhouse Gas Emissions Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other greenhouse gas emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The U.S. EPA granted a waiver to California to implement its greenhouse gas emissions standards for cars.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative

Fuels Plan in consultation with the state, federal, and local agencies. The 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 Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order #S-06-06 establishes targets for the use and production of biofuels and biopower and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The executive order establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The executive order also calls for the state to meet a target for use of biomass electricity.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. EO-S-20-06 establishes responsibilities and roles of the Secretary of Cal/EPA and state agencies in climate change

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that the CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

EO S-13-08

EO S-13-08 was issued on November 14, 2008. The EO is intended to hasten California's response to the impacts of global climate change, particularly sea level rise, and directs state agencies to take specified actions to assess and plan for such impacts, including requesting the National Academy of Sciences to prepare a Sea Level Rise Assessment Report, directing the Business, Transportation, and Housing Agency to assess the vulnerability of the State's transportation systems to sea level rise, and requiring the Office of Planning and Research and the Natural Resources Agency to provide land use planning guidance related to sea level rise and other climate change impacts.

The order also required State agencies to develop adaptation strategies to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. The adaption strategies report summarizes key climate change impacts to the State for the following areas: public health; ocean and coastal resources; water supply and flood protection; agriculture; forestry;

biodiversity and habitat; and transportation and energy infrastructure. The report recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

Assembly Bill 32 - Climate Change Scoping Plan

On December 11, 2008, the CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of the CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO_2e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. (This is a reduction of 42 MMT CO_2e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions the CARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- the Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- a renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017 (the *Final Scoping Plan*). The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the state. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has put California on track to meet the 2020 target. The 2017 Update expands the scope of the plan further by focusing on the strategy for achieving the state's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32), and substantially advances toward the state's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Update relies on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to delivery climate, air quality, and other benefits. The 2017 Update identifies new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health.

Senate Bill 32

Senate Bill 32, which passed into law in 2016, sets the target of reducing greenhouse gas emissions to 40 percent below the 1990 level by the year 2030. SB 32 extends the original set of greenhouse gas targets provided by the passage of AB 32 (the Global Warmings Solutions Act of 2006). This new

target sets an aggressive goalpost, helping the State along its pathway to achieve its longer-term goal of an 80 percent reduction in greenhouse gas emissions by the year 2050.

Senate Bill 743

SB 743, passed into law in 2013, changes the way that public agencies evaluate the transportation impacts of projects under CEQA. The proposed revisions to the State CEQA Guidelines would establish new criteria for determining the significance of a project's transportation impacts that will more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHGs. The 2017 Update to the Scoping Plan identified that slower VMT growth from more efficient land use development patterns would promote achievement of the state's climate goals.

As detailed in SB 743, the Governor's Office of Planning and Research (OPR) was tasked with developing potential metrics to measure transportation impacts and replace the use of delay and level of service (LOS). More detail about SB 743 is provided in the setting section of Chapter 3.14, "Traffic and Circulation" of the Draft EIR.

In December 2018, OPR released its final changes to the CEQA Guidelines, including the addition of Section 15064.3 of the CEQA Guidelines that would implement SB 743. In support of these changes, OPR also published its Technical Advisory on Evaluating Transportation Impacts in CEQA, which recommends that the transportation impact of a project be based on whether it would generate a level of vehicle miles traveled (VMT) per capita for residential projects or per employee for employment projects that is 15 percent lower than existing development in the city, county, or region. OPR's technical advisory explains that this criterion is consistent with Section 21099 of the California Public Resources Code, which states that the criteria for determining significance must "promote the reduction in greenhouse gas emissions". It is also consistent with the statewide per capita VMT reduction target developed by Caltrans in its Strategic Management Plan, which calls for a 15 percent reduction in per capita VMT, compared to 2010 levels, by 2020. Additionally, the California Air Pollution Control Officers Association (CAPCOA) determined that a 15 percent reduction in VMT is typically achievable for projects. CARB's First Update to the Climate Change Scoping Plan also called for local governments to set communitywide GHG reduction targets of 15 percent below then-current levels by 2020. Although not required, a lead agency may elect to be governed by the provisions of Section 15064.3 immediately. However, the provisions of Section 15064.3 do not apply statewide until July 1, 2020.

Executive Order B-48-18: Zero-Emission Vehicles

In January 2018, EO B-48-18 was signed into law and requires 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 charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This Executive 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 (Governor's Interagency Working Group on Zero-Emission Vehicles 2016) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential uses through the Low Carbon Fuel Standard Program, and recommend how to ensure affordability and accessibility for all drivers.

Assembly Bill 2076: California Strategy to Reduce Petroleum Dependence

In response to the requirements of Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), the CEC and the CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and the CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non- petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

Assembly Bill 2188: Solar Permitting Efficiency Act

Assembly Bill (AB) 2188, enacted in California in 2015, required local governments to adopt a solar ordinance by September 30, 2015 that creates a streamlined permitting process that conforms to the bests practices for expeditious and efficient permitting of small residential rooftop solar systems. The act is designed to lower the cost of solar installations in California and further expand the accessibility of solar to more California homeowners. The bulk of the time and cost savings associated with a streamlined permitting process comes from the use of a standardized eligibility checklist and a simplified plan. This bill also shortens the number of days for those seeking Homeowner's Association (HOA) approval for a written denial of a proposed solar installation.

Governor's Low Carbon Fuel Standard (Executive Order #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by the CARB pursuant to AB 32.

Senate Bill 97

Senate Bill (SB) 97 (Chapter 185, 2007) required OPR to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

Senate Bill 375

Senate Bill (SB) 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the existing Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a state target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the state's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.

Finally, SB 375 amended the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

Executive Order B-30-15

On April 29, 2015, Governor Jerry Brown issued Executive Order (EO) B-30-15, which establishes a State GHG reduction target of 40 percent below 1990 levels by 2030. The new emission reduction target provides for a mid-term goal that would help the State to continue on course from reducing GHG emissions to 1990 levels by 2020 (per AB 32) to the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050 (per EO S-03-05). This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions. EO B-30-15 also addresses the need for climate adaptation and directs State government to:

- Incorporate climate change impacts into the State's Five-Year Infrastructure Plan;
- Update the Safeguarding California Plan, the State climate adaptation strategy, to identify how climate change will affect California infrastructure and industry and what actions the State can take to reduce the risks posed by climate change;
- Factor climate change into State agencies' planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions.

SB 100- Renewables Portfolio Standard Program

Under the policy, California's renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers and 100 percent of electricity procured to serve state agencies by December 31, 2045. The policy requires the transition to a zero-carbon electric system does not cause or contribute to increases of greenhouse gas emissions elsewhere in the western electricity grid.

SB 100 requires the CEC, CPUC, and CARB to complete a joint agency report to the Legislature evaluating the 100 percent zero-carbon electricity policy, as described below. The report will be developed using a public process and qualitative and quantitative analyses to address the requirements and intent of the statute.

Advanced Clean Cars Program

In January 2012, the CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The program will have significant energy demand implications as battery, fuel cell, and/or plug-in hybrid electric vehicle sales increase overtime, creating new demand for electricity services both in residential and commercial buildings (e.g. charging stations) as well as demand for new EV and hydrogen fuel cell charging stations. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. According to the CARB, by 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions than the statewide fleet in 2016.

Executive Order N-79-20

The Order requires the California Air Resources Board (CARB) develop regulations that: (1) require all in-state sales of new passenger cars and trucks be zero-emission by 2035; (2) require all medium- and heavy-duty vehicles, "where feasible," be zero emission by 2045; and (3) work to make all off-road vehicles and equipment zero emissions by 2035.

California Building Energy Efficiency Standards

The California Energy Code (California Code of Regulations, Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current 2019 Building Energy Efficiency Standards, commonly referred to as the "Title 24" standards, include changes from the previous standards that were adopted, to do the following:

- Provide California with an adequate, reasonably priced, and environmentally sound supply of energy.

- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020.
- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.
- Act on the California Energy Commission's Integrated Energy Policy Report, which finds that standards are the most cost effective means to achieve energy efficiency, states an expectation that the Building Energy Efficiency Standards will continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Building Energy Efficiency Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions.
- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of State building codes.
- Meet Executive Order S-20-04, the Green Building Initiative, to improve the energy efficiency of non-residential buildings through aggressive standards.

The most recent Title 24 standards are the 2019 Title 24 standards. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. The California Energy Commission updates the standards every three years.

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. This will reduce greenhouse gas emissions by 700,000 metric tons over three years, equivalent to taking 115,000 fossil fuel cars off the road. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.

LOCAL

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the agency responsible for air quality planning and regulation in the San Francisco Bay Area and is also involved in the development of models and emissions thresholds that can be used to address GHG emissions. BAAQMD only has authority over GHG emissions from development projects that include air quality permits. The BAAQMD has a goal to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050. In addition, the BAAQMD maintains the 2018 Climate Protection Grant Program, which awarded $4.5 million to 17 projects at 15 regional public agencies in two program areas: (1) reducing GHGs from existing buildings, and (2) fostering innovative strategies for long-term GHG reduction.

In addition, the BAAQMD maintains the 2017 Clean Air Plan, which is a roadmap for the BAAQMD's efforts over the next few years to reduce air pollution and protect public health and the global climate. The 2017 Plan identifies potential rules, programs, and strategies to reduce GHG emissions

and other harmful air pollutants in the Bay Area. The 2017 Plan complements and supports other important regional and state planning efforts, including Plan Bay Area and the State of California's 2030 Scoping Plan.

Association of Bay Area Governments/Metropolitan Transportation Commission

The Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) are jointly responsible for regional planning for the nine county, 101 city, San Francisco Bay Area. ABAG/MTC jointly adopted its second RTP/SCS known as Plan Bay Area 2040, in 2017, which serves as a limited and focused update to ABAG/MTC's previous Sustainable Communities Strategy (SCS) and maintains a similar set of land use and transportation strategies.

Plan Bay Area 2040 carries over a land use scenario that emphasizes "focused growth" by promoting more compact, mixed-use residential and commercial neighborhoods situated near transit through infill and redevelopment strategies, while preserving open space areas. The 2017 SCS transportation strategies resemble those in the 2013 SCS, with an emphasis on "fix-it-first" and enhancing and modernizing existing transit and roadway infrastructure. Expansion projects are intended to improve transit efficiency or capacity and add high-occupancy vehicle or toll lanes to roadways.

City of Milpitas

The City of Milpitas adopted a Climate Action Plan (CAP) in 2013 to make Milpitas a more sustainable community by reducing GHG emissions and to establish a "qualified greenhouse gas reduction strategy." In addition, the CAP provides guidance for adapting to anticipated effects of climate change. The CAP looks at five key sectors— energy use, vehicle miles, waste production, water usage, and off-road activities—the CAP incorporates best practices to produce a blueprint for achieving GHG emissions reduction in Milpitas and ultimately, to comply with AB 32 and SB 375. The 2013 Baseline Inventory identified the on-road transportation sector as the largest source of emissions in Milpitas, encompassing approximately 50% of overall community emissions. The non-residential energy (29%), residential energy (10%), solid waste (8%), off-road equipment (2%), light rail (<1%), water and wastewater (<1%), and direct wastewater (<1%) sectors represent the other GHG sectors included in the CAP. At the time of preparation of this Draft EIR, the City has embarked on the process to update the 2013 CAP to include new GHG reduction targets for the years 2030 and 2050, consistent with the requirements of Assembly Bill 32, SB 375, and Executive Orders S-03-05 and B-30-15.

3.7.3 IMPACTS AND MITIGATION MEASURES

GREENHOUSE GASES THRESHOLDS OF SIGNIFICANCE

Per Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the proposed project would do any of the following:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Analysis Approach

Implementation of the proposed project will influence future development that would generate greenhouse gases and contribute to climate change. Future development projects would be required to determine if individually they exceed recognized or adopted thresholds that comply with adopted greenhouse gas reduction plans.

The latest threshold developed by BAAQMD for greenhouse gas emissions for plans is compliance with a Qualified GHG Reduction Strategy or 6.6 MT CO2e/service population/year.[2] As noted above, the City of Milpitas has an adopted Qualified GHG Reduction Strategy (the 2013 CAP). As such, compliance with this adopted CAP is the threshold of significance used in this analysis.

[2] Note: Service population includes both population and employees.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: General Plan implementation has the potential to generate GHG emissions that could have a significant impact on the environment (Less than Significant)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the proposed project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

Development that occurs because of implementation of the proposed project would include activities that emit greenhouse gas emissions over the short and long term. A summary of short- and long-term emissions and the analysis for each are included below.

The major projected impacts of climate change in Milpitas are expected to be more days of extreme heat over longer periods, as well as potential for flooding. According to the Climate Action Plan developed for the City of Milpitas, the major sources of GHGs in Milpitas are on-road transportation (50%), non-residential energy (29%), and residential energy (10%). Short-term and long-term emissions typically associated with construction and operations of future development projects, which may occur because of implementation of the proposed project, are further described below.

SHORT-TERM EMISSIONS

Short-term greenhouse gas emissions would occur because of construction equipment used for the following: demolition, grading, paving, and building construction activities associated with future development and infrastructure projects that will be undertaken in Milpitas over the next 20 years. GHG emissions would also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. As such, BAAQMD recommends in its draft threshold to amortize project-specific construction emissions over a 30-year operational lifetime of a project. This normalizes construction emissions so that they can be grouped with operational emissions to generate a precise project GHG inventory. As described in Table 2-5 of the 2017 BAAQMD CEQA Guidelines, there is no threshold of significance for construction-related GHG emissions for plan-level impacts (including general plans).

Adoption of the proposed General Plan does not directly approve or otherwise entitle any new development projects or infrastructure improvement projects in Milpitas. As such, the construction-

related GHG emissions of future projects cannot be known or quantified at this time, as it would be highly speculative. Typically, construction-related GHG emissions contribute unsubstantially (less than one percent) to a project's annual greenhouse gas emissions inventory and mitigation for construction-related emissions is not effective in reducing a project's overall contribution to climate change, given how small of a piece of the total emissions construction emissions are. Short-term climate change impacts due to future construction-related activities would be subject to State requirements for GHG emissions and would be assessed on project-by-project basis, as required by the Milpitas Climate Action Plan and the BAAQMD. Milpitas CAP Measure 12.2: Construction Best Management Practices, encourages projects to comply with BAAQMD performance-based best management practices that reduce GHG emissions during construction, including use of alternative-fueled vehicles, use of local recycled materials, and recycling of construction or demolition materials. This CAP measure is consistent with the guidance provided by the BAAQMD in Section 8.2: Construction-Related GHG Impacts in the 2017 BAAQMD CEQA Guidelines.

These requirements are further supported by General Plan Policy CON 7-4, which requires projects to adhere to the requirements of the BAAQMD; and Policy CON 7-5, which requires the City to use the development review process and the CEQA process to evaluate and mitigate the local and cumulative effects of new development on air quality.

LONG-TERM EMISSIONS

Future development projects will result in continuous GHG emissions from mobile, area, and operational sources. Mobile sources, including vehicle trips to and from development projects, will result primarily in emissions of CO_2, with minor emissions of CH_4 and N_2O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by future development and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas inventory for typical development projects.

As shown in Table 2.0-2 in Chapter 2.0 of this Draft EIR, buildout of the City's existing General Plan would result in a projected population of 107,779. With implementation of the proposed project, the City of Milpitas Planning Area is estimated to grow to a total population of 113,530. This is an approximately 5% increase compared to the previous population forecast. However, the land use modifications and policies proposed as part of the proposed General Plan would result in an approximately 14% reduction in per capita vehicle miles traveled compared to 2040 buildout of the existing General Plan, as shown in Table 3.14-2 in Chapter 3-14 of this Draft EIR. Additionally, the proposed General Plan would result in in an approximately 3% reduction in per service population vehicle miles traveled compared to 2040 buildout of the existing General Plan. However, overall VMT is anticipated to increase in the proposed General Plan compared with the existing General Plan (by approximately 16%). Table 3.7-1, below, provides the VMT summary for the proposed project.

TABLE 3.7-1: VMT SUMMARY FOR THE PROPOSED GENERAL PLAN

YEAR/SCENARIO	TOTAL POPULATION	TOTAL EMPLOYMENT	VMT	VMT PER CAPITA	VMT PER SERVICE POPULATION
2017 – Existing Scenario	76,057	47,538	1,985,460	13.65	16.06
2040 – Existing General Plan	107,779	57,719	2,563,153	12.87	15.49
2040 – Proposed General Plan	113,530	84,333	2,972,767	11.03	15.02

SOURCE: KITTELSON & ASSOCIATES, INC., 2020

NOTE: TOTALS MAY NOT ADD UP DUE TO ROUNDING

According to the CARB's 2017 Climate Change Scoping Plan, the transportation sector remains the largest source of GHG emissions in the State, accounting for 37% of the inventory (CARB, 2017). A typical passenger vehicle emits approximately 4.6 metric tons of CO_2 per year (U.S. EPA, 2018). This number can vary based on a vehicle's fuel, fuel economy, and the number of miles driven per year. The 14% reduction in per capita vehicle miles traveled, and 3% reduction in per service population vehicle miles traveled (under buildout for the proposed General Plan compared with the buildout of the existing General Plan) would have a substantial reduction in per capita and per service population greenhouse gas emissions, respectively.

In order to reduce community-wide GHG emissions, Milpitas has an adopted Climate Action Plan, which is a Qualified GHG Reduction Plan. The CAP is designed to streamline environmental review of future development projects in the City of Milpitas consistent with CEQA Guidelines Section 15183.5(b) and the BAAQMD CEQA Air Quality Guidelines. The CAP identifies a strategy, reduction measures, and implementation strategies the City will use to achieve the State-recommended greenhouse gas (GHG) emissions reduction targets. The City uses the CAP to achieve GHG emissions reductions in a manner consistent with Assembly Bill (AB) 32 within discretionary projects on a project-by-project basis and through ongoing planning activities and programs.

The proposed General Plan has been developed to be consistent with the adopted CAP, and to further the goals and implementation strategies identified in the CAP. For example, CAP Goals 1 and 2 call for increased energy efficiency in existing and new development, respectively. These CAP goals are supported by the following General Plan policies:

> *Policy CD 11-2: Encourage passive solar design and energy-efficient concepts, including, but not limited to natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.*
>
> *Policy CD 11-5: Encourage the use of building materials that conserve energy and material resources.*
>
> *Policy CON 1-2: Ensure all development projects comply with the mandatory energy efficiency requirements of the California Green Building Standards Code (CALGreen).*
>
> *Policy CON 1-3: Support innovative green building best management practices including, but not limited to, LEED certification, and encourage project applicants to exceed the most current "green" development standards in the California Code of Regulations (CCR), Title 24, as feasible.*

Policy CON 1-9: Encourage site planning and building techniques that promote energy conservation. Where feasible, encourage projects to take advantage of shade, prevailing winds, landscaping, sunscreens, building orientations, and material choices that reduce energy use.

Policy CON 1-13: Support projects and programs such as appliance upgrades and the use of electric appliances, and energy storage options that reduce the use of and reliance on natural gas.

CAP Goal 5 promotes mixed use development, and CAP Goal 6 promotes transportation-oriented development. These CAP goals are supported by the following General Plan policies:

Policy LU-3.1: Support regional efforts that promote higher densities near major transit and travel facilities, and reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit. Support local and regional land use decisions that promote safe access to and the use of alternatives to auto transit.

Policy LU-3.2: Continue to utilize planning tools (including specific plans and overlay districts) that promote transit-oriented and mixed-use development objectives near the Milpitas Transit Center.

Policy LU-4.3: Support conveniently located neighborhood-serving commercial centers that provide desired services to local neighborhoods workers and visitors, reduce automobile dependency, and contribute positively to the surrounding neighborhoods.

Policy LU-6.6: Encourage redevelopment and intensification of mixed-use areas by allowing stand-alone vertical mixed-use, or integrated horizontal mixed-use projects in mixed use areas, consistent with the Land Use Map and policies and actions included in this element.

CAP Goals 7 and 8 promote expanded use of transit as well as bicycle and pedestrian-oriented development. These CAP goals are supported by the following General Plan policies:

Policy LU-4.2: Emphasize efforts to reduce regional vehicle miles traveled by supporting land use patterns and site designs that promote active modes of transportation, including walking, biking, and public transit.

Policy CIR-2.1: Promote multimodal transportation options by developing an interconnected system of streets, roads, bridges, and highways that provides continuous, efficient, safe and convenient travel for all users regardless of mode, age or ability and encourage users to walk, ride a bicycle, or use transit for shorter, local trips.

Policy CIR-3-1: Coordinate with VTA and BART to design and implement capital improvements that support safety and access to rail stations and bus stops.

Policy CIR-3-2: Coordinate transit planning and provision of transit-supportive infrastructure with Caltrans, VTA, BART, and other service providers to provide seamless service for users across transit modes and to facilitate transfers.

Policy CIR 5-2: Adopt a citywide TDM ordinance to require and encourage vehicle trip reduction at employment sites, businesses, and multi-unit residential facilities, and hire

dedicated staff to work closely with communities throughout the City on ongoing education and encouragement efforts.

There are numerous other General Plan policies and actions that further support and implement the goals established by the CAP, and that would minimize potential impacts associated with GHG emissions in the Planning Area. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the reduction of GHG emissions, including the adopted CAP. The City of Milpitas has prepared the General Plan to include numerous policies and actions intended to reduce GHG emissions associated with future development and improvement projects. GHG emissions would be minimized through the implementation of the policies and actions listed below.

Crucially, the proposed General Plan includes Action CON-1a, which requires the City to update the City's existing CAP to achieve the greenhouse gas reduction targets for 2030, and 2050. Updates to the CAP should align the City's updated GHG reduction targets with the statewide GHG reduction targets established by AB 32, SB 375, and Eos S-03-05 and B-30-15. The proposed General Plan's consistency with the existing 2013 Milpitas CAP and the forthcoming update to the 2013 Milpitas CAP ensures that the proposed project is consistent with a Qualified GHG Reduction Strategy (i.e. the CAP). Therefore, potential impacts to this topic would therefore be **less than significant**.

CONCLUSION

As demonstrated in the analysis provided above, the General Plan would reduce VMT per capita and VMT per service population, compared with the existing General Plan, in buildout year 2040. In addition, the proposed project is consistent with the existing 2013 CAP, and will also be consistent with the forthcoming update to the 2013 Milpitas CAP, ensuring consistency with a Qualified GHG Reduction Strategy. Therefore, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

While future development would generate GHGs that would contribute to climate change, the implementation of the General Plan policies and action listed below, as well as Federal and State regulations, and implementation of the adopted Milpitas CAP would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

Policy LU-3.1: Support regional efforts that promote higher densities near major transit and travel facilities, and reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit. Support local and regional land use decisions that promote safe access to and the use of alternatives to auto transit.

Policy LU-3.2: Continue to utilize planning tools (including specific plans and overlay districts) that promote transit-oriented and mixed-use development objectives near the Milpitas Transit Center.

Policy LU-3.3: Integrate climate change and adaptation planning principles into future updates of the Zoning Code, and other related long-range utilities and facilities planning documents. (See the

Safety Element for additional policies related to adaptation, and the Conservation Element for policies related to climate change and climate action).

Policy LU-4.2: Emphasize efforts to reduce regional vehicle miles traveled by supporting land use patterns and site designs that promote active modes of transportation, including walking, biking, and public transit.

Policy LU-4.3: Support conveniently located neighborhood-serving commercial centers that provide desired services to local neighborhoods workers and visitors, reduce automobile dependency, and contribute positively to the surrounding neighborhoods.

Policy LU-4.4: Encourage new development to facilitate pedestrian and bicycle access through techniques such as minimizing building separation from public sidewalks; providing safe, accessible, convenient, and pleasant pedestrian connections; and including secure and convenient bike storage.

Policy LU-5.1: Require new development and redevelopment to be compatible, complementary and, where appropriate, well integrated with existing residential areas. Integrate new large-scale development projects into the fabric of the existing community rather than allowing projects to be insular and self-contained, walled off, or physically divided from surrounding uses. Improve connectivity between neighborhoods and services with new development. Tie circulation systems and open spaces into existing streets and open spaces. Reduce unnecessary barriers and improve connections between neighborhoods and services by retrofitting existing development over time as area improvements or redevelopment occurs.

Policy LU-6.6: Encourage redevelopment and intensification of mixed-use areas by allowing stand-alone vertical mixed-use, or integrated horizontal mixed-use projects in mixed use areas, consistent with the Land Use Map and policies and actions included in this element.

CIRCULATION ELEMENT POLICIES

Policy CIR-2.1: Promote multimodal transportation options by developing an interconnected system of streets, roads, bridges, and highways that provides continuous, efficient, safe and convenient travel for all users regardless of mode, age or ability and encourage users to walk, ride a bicycle, or use transit for shorter, local trips.

Policy CIR-3-1: Coordinate with VTA and BART to design and implement capital improvements that support safety and access to rail stations and bus stops.

Policy CIR-3-2: Coordinate transit planning and provision of transit-supportive infrastructure with Caltrans, VTA, BART, and other service providers to provide seamless service for users across transit modes and to facilitate transfers.

Policy CIR-3-3: Work with local stakeholders and VTA to ensure that paratransit services adequately meet the needs of people with disabilities in Milpitas.

Policy CIR-3-4: Ensure that all transit-supportive infrastructure, sidewalks, and bike lanes are adequately maintained to provide high-quality facilities for users.

Policy CIR-4-1: Encourage a shift to active transportation modes by expanding and enhancing current pedestrian and bicycle facilities to accommodate pedestrians and bicyclists of all ages and abilities

and encourage all users to reduce vehicle trips and utilize active transportation options with an increase in density of pedestrian and bicycle-supportive infrastructure.

Policy CIR-4-2: Link and expand City pedestrian and bicycle circulation facilities to existing and planned local and regional networks, with an emphasis on expanding infrastructure options near transit.

Policy CIR 4-3: Encourage walking, biking and transit use by prioritizing and implementing "first-mile/last mile" improvements, wayfinding and educational efforts in the vicinity of the Great Mall transit center, light rail stations, the BART station, and heavily used bus stops.

Policy CIR 4-4: Provide secure bicycle parking and end-of-trip support facilities (publicly accessible lockers, changing rooms and showers) at centers of civic, retail, recreation, education, and work activity.

Policy CIR 4-5: Support building bridges or under-crossings across creek channels, railroad lines and roadways in a manner that will enhance safety, improve network connectivity, and facilitate bicycling and walking between high density residential developments, retail centers, civic buildings, and recreational centers.

Policy CIR 4-6: Eliminate gaps in the pedestrian and bicycle network, especially between neighborhoods, trails that access schools, and areas with higher health disparities.

Policy CIR 5-1: Develop, implement, and monitor vehicle trip reduction requirements for large development projects – including all land use types – to minimize the impact of new development on traffic congestion and to reduce vehicle emissions.

Policy CIR 5-2: Adopt a citywide TDM ordinance to require and encourage vehicle trip reduction at employment sites, businesses, and multi-unit residential facilities, and hire dedicated staff to work closely with communities throughout the City on ongoing education and encouragement efforts.

Policy CIR 5-3: Encourage existing employers to adopt strategies to implement programs to reduce employee vehicle trips, including purchasing passes through VTA's annual transit pass program; providing facilities such as secure bike parking, lockers, changing rooms, and showers; telework, and flexible work schedules.

Policy CIR 5-4: Encourage developers to provide enhanced TDM programs and alternative transportation infrastructure that exceeds minimum requirements in exchange for reduced parking requirements, with a focus on priority development areas and locations in proximity to high capacity transit.

Policy CIR 5-5: Cooperate with other private entities and public agencies to promote local and regional transit serving Milpitas.

Policy CIR 6-1: Develop guidelines for the inclusion of green infrastructure in the design of transportation improvements.

Policy CIR 6-2: Support development of healthier communities through the use of lower- or non-polluting modes of transportation to reduce GHG vehicle emissions and local air pollution levels.

Policy CIR 6-3: Encourage walking and bicycling as strategies to promote public health and reduce the long-term transportation costs of owning and maintaining a vehicle.

Policy CIR 6-4: Prioritize transportation improvements in part based on consideration of benefits to disadvantaged communities.

Policy CIR 6-5: Include a robust, inclusive and interactive community engagement and educational process in transportation planning efforts to help ensure that project will address the needs of local stakeholders, especially disadvantaged populations.

Policy CIR 6-6: Work with stakeholders to encourage the development of electric vehicle charging stations and other alternative fuel infrastructure at publicly-owned locations, near businesses, and employment sites.

Policy CIR 6-7: Develop impact fees to provide revenues to be used to construct pedestrian and bicycle infrastructure that will support new development.

Policy CIR 6-8: Use repaving projects as an opportunity to cost-effectively implement new bicycle facilities in accordance with City plans.

Policy CIR 6-9: Maximize efficient maintenance of transportation infrastructure of all modes, such as coordinating roadway paving or striping projects to include maintenance of pedestrian and bicycle infrastructure.

COMMUNITY DESIGN ELEMENT POLICIES

Policy CD 6-1: Support a complete streets approach to designing new streets and retrofitting existing streets by encouraging streets to provide stimulating settings; improve safe walkability, bicycling, and transit integration; strengthen connectivity; and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, human-scaled street lighting, and street furniture.

Policy CD 6-3: Consider the street type of all adjacent streets in the development review process to ensure that the design of the site, buildings, and public way respond to the multi-modal priorities for the area.

Policy CD 11-2: Encourage passive solar design and energy-efficient concepts, including, but not limited to natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.

Policy CD 11-5: Encourage the use of building materials that conserve energy and material resources.

Policy CD 11-8: Encourage low-impact development, including but not limited to, bioretention cells/rain gardens, cisterns and rain barrels, green roofs, pervious concrete/porous pavement, bioswales, and media filters.

Policy CD 11-9: Encourage the use of green roofs, which help reduce the heat island effect.

Policy CD 11-10: Consider expanding the City's Green Building Program to include additional incentives, above and beyond expedited building permit processing, for projects that incorporate sustainable design approaches and/or elements that exceed local, regional, and state requirements.

Policy CD 11-11: Continue to apply and expand the Climate Action Plan to increase the energy efficiency of development.

CONVERSATION ELEMENT POLICIES

Policy CON 1-1: Ensure that new development is consistent with the energy objectives and targets identified by the City's Climate Action Plan (CAP).

Policy CON 1-2: Ensure all development projects comply with the mandatory energy efficiency requirements of the California Green Building Standards Code (CALGreen).

Policy CON 1-3: Support innovative green building best management practices including, but not limited to, LEED certification, and encourage project applicants to exceed the most current "green" development standards in the California Code of Regulations (CCR), Title 24, as feasible.

Policy CON 1-4: Require large-scale industrial and manufacturing energy users to implement an energy conservation plan as part of the project review and approval process.

Policy CON 1-5: Consider lifecycle costs when identifying opportunities for the replacement and retrofit of energy efficient technologies when upgrading or maintaining City facilities.

Policy CON 1-6: Reduce the City's energy demand by pursuing the use of alternative energy and fuel-efficient City vehicles and equipment, and strive for a zero-emission City vehicle fleet to the extent feasible and practical.

Policy CON 1-7: Support the production of alternative and renewable energy fueling stations in Milpitas.

Policy CON 1-8: Encourage energy efficiency and conservation through public awareness and educational opportunities.

Policy CON 1-9: Encourage site planning and building techniques that promote energy conservation. Where feasible, encourage projects to take advantage of shade, prevailing winds, landscaping, sunscreens, building orientations, and material choices that reduce energy use.

Policy CON 1-10: Encourage distributed energy resources including solar, fuel cells etc. to provide environmental benefits, as well as energy security, and the support of the grid during peak energy use periods.

Policy CON 1-11: Consider incentive programs such as reduced fees, and permit expedition for projects that exceed mandatory energy requirements, incorporate alternative energy technologies, or support the City's energy objectives.

Policy CON 1-12: Promote incentives from local, state, and federal agencies for improving energy efficiency and expanding renewable energy installations.

Policy CON 1-13: Support projects and programs such as appliance upgrades and the use of electric appliances, and energy storage options that reduce the use of and reliance on natural gas.

Policy CON 7-2: Minimize exposure of the public to toxic or harmful air emissions and odors through requiring an adequate buffer or setback distance between residential and other sensitive land uses and land uses that typically generate air pollutants, toxic air contaminants, or obnoxious fumes or odors, including but not limited to industrial, manufacturing, and processing facilities, high-volume roadways, and industrial rail lines. New sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, churches, and medical facilities shall be located away from existing point sources of air pollution such that excessive levels of exposure do not result in unacceptable health risks. Compliance shall be verified through the preparation of a Health Risk Assessment when deemed necessary by the Planning Director.

Policy CON 7-3: Require projects which generate high levels of air pollutants, such as heavy industrial, manufacturing facilities and hazardous waste handling operations, to incorporate air quality mitigations in their design to reduce impacts to the greatest extent feasible.

Policy CON 7-4: Require projects to adhere to the requirements of the Bay Area Air Quality Management District (BAAQMD).

Policy CON 7-5: Use the City's development review process and the California Environmental Quality Act (CEQA) to evaluate and mitigate the local and cumulative effects of new development on air quality.

Policy CON 7-6: Coordinate with the California Air Resources Board (CARB) and the Bay Area Air Quality Management District to properly measure air quality emission sources and enforce the standards of the Clean Air Act.

Policy CON 7-7: Comply with regional, state, and federal standards and programs for control of all airborne pollutants and noxious odors, regardless of source.

Policy CON 7-8: Consider the health risks associated with Toxic Air Contaminants (TACs) when reviewing development applications.

Policy CON 7-9: Coordinate with Santa Clara County and nearby cities to implement regional GHG reduction plans and to consolidate efforts to reduce GHGs throughout the county as appropriate.

Policy CON 7-10: Implement policies and action from the Land Use and Circulation Elements to provide mixed-use developments, locate high-density uses near transit facilities, provide neighborhood-serving retail uses convenient to residential neighborhoods, and other Transportation Demand Management (TDM) programs that would reduce vehicle trips and vehicle miles traveled, thus reducing air-pollutant emissions.

Policy CON 7-11: Encourage improvements and design features that reduce vehicle delay such as bus turnouts, and synchronized traffic signals for new development to reduce excessive vehicle emissions caused by idling.

Policy CON 7-12: Encourage and prioritize infrastructure investments and improvements that promote safe walking, bicycling and increased transit ridership.

Policy CON 7-13: Implement energy policies and actions that have co-benefits of reduced air pollution and greenhouse gases by increasing energy efficiency, conservation, and the use of renewable resources.

CIRCULATION ELEMENT ACTIONS

Action CIR-3a: Prioritize, install, and maintain bus stop amenities to enhance the transit user experience, especially for vulnerable populations, including shelters, benches, and lighting.

Action CIR-3b: Support regional planning efforts for the development of mass transit facilities such as transit priority for designated bus rapid transit, transit signal priority, bus queue jump lanes, exclusive bus queue jump lanes, exclusive transit lanes, and other transit preferential treatments, where appropriate.

Action CIR-4a: Prioritize, fund, and implement a comprehensive system of sidewalks, bikeways, and off- street trails that connects all parts of the City as identified in the Bikeway and Pedestrian Master Plan and Trails Master Plan and in accordance with the City of Milpitas Municipal Code.

Action CIR-4b: Invest in and support Safe Routes to School efforts – including infrastructure improvements, education and encouragement programs, and enforcement activities – to encourage walking and bicycling to school and to support the reduction of greenhouse gas emissions and vehicle miles traveled, with an emphasis on areas near schools where higher health disparities are present and traffic conflicts are common.

Action CIR-4c: Support bicycle education programs for people of all ages and abilities.

Action CIR-4d: Distribute the Milpitas Bicycle Map, Trail Map, bicycle safety information and other related materials on the City's web site, at City buildings and schools, and special events.

Action CIR-4e: Update the Streetscape Master Plan goals, policies, and actions to improve the appearance and enjoyment of public streets and sidewalks in Milpitas, particularly with regards to landscaping, street furniture and the identification of significant entryways and corridors.

Action CIR-4f: In conjunction with neighboring jurisdictions, establish a safe and viable bike share program that will serve communities throughout Milpitas.

Action CIR-4g: Adopt policies to ensure that bikeshare and other micromobility modes are safe for the user, do not create significant life-cycle environmental impact, and do not create a public nuisance on sidewalks or other public and private outdoor amenities.

Action CIR-4h: Adopt policies to ensure that bikeshare and other micromobility modes are available in neighborhoods throughout Milpitas, including disadvantaged neighborhoods, but do not create additional access barriers for vulnerable populations.

Action CIR-4i: Develop guidelines and priority locations for implementing enhanced pedestrian crossings and safe, adequate infrastructure for pedestrians and bicyclists.

Action CIR-4j: Modify the Milpitas Zoning Ordinance to require the amount, type, and location of bicycle parking, to be determined based on land use to best serve the needs of employees, customers, and visitors.

Action CIR-4k: Modify the Milpitas Zoning Ordinance to include requirements for new developments to provide end- of-trip facilities such as on-site showers, changing rooms, and clothing storage lockers where feasible.

Action CIR-4l: Require developer contributions toward pedestrian and bicycle capital improvement projects, bicycle parking, and first and last-mile connections to promote active modes of transportation and install needed infrastructure.

Action CIR-4m: Develop a local wayfinding signage system to support the City's bicycle facilities network and guide users to destinations including commercial centers and transit stations.

Action CIR-4n: Provide accessible pedestrian signals and appropriate signal timing to pedestrian crossings at priority locations, including the transit center and BART station, senior residential complexes, civic buildings, schools, libraries, and medical facilities.

Action CIR-4o: Identify pedestrian facilities which are not ADA compliant throughout the City and implement necessary improvements.

Action CIR-4p: Require sidewalks to be provided on both sides of the street throughout the City as a condition of development approval, to ensure pedestrian access that is comfortable, convenient, and serves the needs of all users. Encourage exceedance of minimum standards, especially at locations where large number of pedestrians are anticipated.

Action CIR-4q: Make improvements to roads, signs, and traffic signals as needed to improve accessible, safe, and convenient bicycle and pedestrian travel.

Action CIR-4r: Review City street improvement standards to see if there are ways to decrease high stress walking and bicycling environments and increase walking enjoyment and safety, particularly with regards to increased sidewalk width, landscape buffers between sidewalks, streets and pedestrian lighting, and other amenities.

Action CIR-4s: Provide bicycle actuated traffic signal detection.

Action CIR-4t: Include evaluation of bicycle and pedestrian facility needs in all planning applications for new developments and major remodeling or improvement projects.

Action CIR-4u: Where appropriate, require new development to provide public access points to the trail system and/or contribute to staging areas.

Action CIR-4v: Encourage existing businesses to provide access to the trail system.

Action CIR-4w: Use existing cul-de-sacs, bridges and other public improvement areas as trail access points wherever possible.

Action CIR-4x: Use existing parks, schools and other public facilities as trail use staging areas wherever possible.

Action CIR-4y: Coordinate with regional and local stakeholders to complete the portion of the San Francisco Bay Trail within the City of Milpitas.

Action CIR-4z: Monitor proposed developments and work with applicants to design projects that preserve the integrity of the identified trail routes.

Action CIR-5a: Provide incentives to developers to unbundle parking from tenant rents.

Action CIR-5b: Explore development of a privately-operated citywide transportation management association to facilitate implementation of TDM strategies on a broader scale and enable participation from small employers and residential complexes.

Action CIR-5c: Encourage flexible strategies to maximize the efficient use of the available parking supply. Review and modify existing City parking requirements to reduce barriers to incoming development.

Action CIR-6a: Design sidewalks and pedestrian pathways using environmental design best practices principles or other techniques to provide safe and comfortable facilities for pedestrians at all times of day and night.

Action CIR-6b: Develop requirements for new commercial and multifamily residential development to provide electric vehicle charging infrastructure.

LAND USE ELEMENT ACTIONS

Action LU-4a: Implement the policies and actions in the Circulation Element that reinforce and implement land use objectives included within this element.

Action LU-4b: Promote collaboration between the Planning, Public Works and Engineering Departments during the City's CIP program process to ensure coordination of infrastructure improvements and alignment with the goals of the General Plan and Bike and Pedestrian Master Plan.

COMMUNITY DESIGN ELEMENT ACTIONS

Action CD-11a: As part of the development review process, ensure that projects incorporate sustainable elements, such as passive solar design, energy-efficient features, water conservation measures, street trees, electric vehicle charging stations, and low impact development features to the extent feasible.

Action CD-11b: Expand the City's Green Building Program to include addition incentives, above and beyond expedited building permit processing, for projects that incorporate sustainable design approaches and/or elements that exceed local, regional, and state requirements. The incentives may include, but are not limited to, additional maximum development density/intensity, lot coverage, building height; and parking reductions.

Action CD-11c: Provide incentives, including, but not limited to, additional maximum development density/intensity, lot coverage, building height; and parking reductions in community benefits programs of specific plans for projects that implement sustainability measures beyond minimum requirements.

CONSERVATION ELEMENT ACTIONS

Action CON-1a: Update the City's Climate Action Plan to achieve the greenhouse gas reduction targets for 2030, and 2050. Updates to the CAP should align the City's GHG reduction targets with

the statewide GHG reduction targets of Assembly Bill 32, SB 375, and Executive Orders S-03-05 and B-30-15.

Action CON-1b: Adopt a City Green-Fleet policy to guide the City in purchasing energy efficient and clean emissions vehicles.

Action CON-1c: Display energy conservation and energy efficiency information including state and local programs, community choice aggregation opportunities, and rebate opportunities on the City's web page.

Action CON-1d: Continue to participate in Silicon Valley Clean Energy (SVCE) whereby city-owned facilities, parks, and streetlights will run on renewable energy sources like wind and solar, and educate and encourage Milpitas residents and businesses to participate in Silicon Valley Clean Energy (SVCE) to reduce greenhouse gas emissions and support statewide alternative energy use.

Action CON-1e: Continue to review all new public and private development projects to ensure compliance with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by California Green Building Standards Code (CALGreen), the General Plan, and the Milpitas Municipal Code Chapter 20 Green Building Regulations.

Action CON-1f: Continue to require all development project applications for new buildings to include a completed LEED or CalGreen Mandatory Measures Checklist.

Action CON-1g: Annually audit and report on the progress toward achieving the Milpitas Climate Action Plan (CAP) goals of reducing community-wide emissions levels by 2030 and 2050. The audit should be publicly available on the City's website, and shall also be presented to the Milpitas Planning Commission and City Council.

Action CON–1h: Periodically review and report on the effectiveness of the measures outlined in the CAP and the strategies in this Element. Institutionalize sustainability by developing a methodology to ensure all environmental, social and lifecycle costs are considered in project, program, policy and budget decisions.

Action CON-7a: As the City replaces landscaping equipment and other mechanical equipment, prioritize as appropriate the purchasing of equipment that would reduce emissions and energy use.

Action CON-7b: Provide regional and local air-quality information on the City's website, including links to the Bay Area Air Quality Management District, the California Air Resources Board, and other environmentally-focused internet sites, and provide information regarding Spare the Air Days.

Action CON-7c: Require site-specific air quality Health Risk Assessments (HRAs) for developments that would place sensitive receptors closer than 500 feet from the edge of a regional roadway facility (including I-680, I-880, and SR-237), or for development projects that would place significant point sources of air pollution such as gas station and dry cleaning facilities, or other industrial facilities that emit toxic air contaminates TACs within 500 feet of a sensitive receptor.

Action CON-7d: Continue to seek the cooperation of the BAAQMD to monitor emissions from identified point sources that impact the community. In addition, for sources not within the regulatory jurisdiction of the City, seek cooperation from the applicable regulatory authority to encourage the reduction of emissions and dust from the pollutant source.

Action CON-7e: Require dust control measures, including those included in the Santa Clara Valley Non-point Source Pollution Control Program, and BAAQMD's Best Management Practices for fugitive dust control during construction.

Action CON-7f: Use the BAAQMD "Air Quality Guidelines", as amended, or replaced, in identifying thresholds, evaluating the potential project and cumulative impacts, and determining appropriate mitigation measures.

Review development, infrastructure, and planning projects for consistency with BAAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address BAAQMD, and General Plan requirements, which includes analysis and identification of:

- *Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions;*
- *Potential exposure of sensitive receptors to toxic air contaminants;*
- *Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions; and*
- *Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.*

Action CON-7g: Continue implementation of the City's Municipal Code Chapter 15, Fireplace/Woodsmoke Pollution, in order to improve and maintain air quality conditions in the City.

Action CON-7h: Prior to the entitlement of a project that may be an air pollution point source, such as a manufacturing facility, the developer shall provide documentation that the use is located and appropriately separated from residential areas and sensitive receptors (e.g., homes, schools, and hospitals).

Action CON-7i: Require construction activity plans, and grading and drainage plans to include and/or provide for dust management to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Project applicants, or their assigned agents/contractors, shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project grading and construction.

Impact 3.7-2: General Plan implementation has the potential to conflict with adopted plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions (Less than Significant)

As described under Impact 3.7-1, the proposed project (Milpitas General Plan) is consistent with the City's adopted Climate Action Plan, which is a Qualified GHG Reduction Plan. The City's CAP has been developed to satisfy the GHG reduction requirements established by AB 32. As further provided under Impact 3.7-1, the GHG emissions that would be emitted with implementation of proposed General Plan would be required to comply with the existing 2013 Milpitas CAP, as well as the forthcoming update to the 2013 Milpitas CAP. The forthcoming update to the 2013 Milpitas CAP is required to be consistent with the GHG reduction targets provided in the CARB's 2017 Scoping Plan, which were developed by the CARB to ensure compliance with AB 32, SB 32, and consistent with Executive Order S-03-05. These laws established a statewide reduction in GHG emissions to 15% below 1990 levels by 2020 (under AB 32), a 40% below 1990 levels by 2030 (under SB 32), and 80% below 1990 levels by 2050 (under AB 32 and consistent with Executive Order S-03-05). The use of these GHG reduction targets in the pending update to the Milpitas CAP is required by Action CAON-1a, as described in greater detail above.

In addition, the General Plan will not conflict with the implementation of regional transportation-related GHG targets outlined in ABAG's Plan Bay Area 2040 because the land use modifications contained in the proposed General Plan, and the corresponding reduction in vehicle miles traveled result in lower emissions than those forecasted in the Plan Bay Area 2040. Additionally, the proposed General Plan would not conflict with any of the other provisions of the Scoping Plan or applicable regulations related to GHG reductions because the General Plan includes a comprehensive approach to expanding transit access, increasing mobility options, promoting a compact pedestrian-oriented urban development pattern, and focuses new development to infill sites at densities higher than those allowed by the existing General Plan. All of these comprehensive policy approaches serve to support regional and statewide efforts to reduce GHG emissions, including CARB's Scoping Plan and ABAG's Plan Bay Area 2040 through energy efficiency, green building, recycling/waste, and water conservation through policies and actions listed under Impact 3.7-1.

CONCLUSION

The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. There is a **less than significant** impact relative to this topic.

ENERGY CONSERVATION THRESHOLDS OF SIGNIFICANCE

The proposed project would result in a significant impact on energy use if it would:

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

Impact 3.7-3: General Plan implementation has the potential to result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Less than Significant)

The State CEQA Guidelines require consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix G of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, a project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project is the updated Milpitas General Plan, with a horizon year of 2040. Buildout of the General Plan includes residential, commercial, office, industrial, mixed-use, open space, and other land uses (see Chapter 2.0: Project Description for further detail). The amount of energy used in the Planning Area at buildout would directly correlate to the type and size of development, the energy consumption associated with unit appliances, outdoor lighting, and energy use associated with other buildings and activities. Other major sources of Planning Area energy consumption include fuel used by vehicle trips generated during construction and operational activities, and fuel used by off-road and on-road construction vehicles during construction. The following discussion provides a breakdown of the energy uses in the Planning Area upon buildout of the proposed project.

ELECTRICITY AND NATURAL GAS

At buildout, the City of Milpitas' electricity and natural gas consumption would be used primarily to power buildings (all types of buildings, including residential, commercial, office, industrial, public, etc.). Electricity would primarily come from the electricity utility provider (Silicon Valley Clean Energy or PG&E), though on-site solar generation would generate a substantial source of energy for the community at General Plan buildout.

FUEL CONSUMPTION - ON-ROAD VEHICLES (OPERATION)

Buildout of the General Plan would generate vehicle trips during its operational phase. Based on the traffic study prepared for the proposed project (W-Trans, 2020), the proposed project would generate approximately 2,972,767 daily vehicles trips. Fuel consumption is anticipated to represent the largest sector of GHG emissions at General Plan buildout. Energy for on-road vehicles would derive from gasoline, diesel, as well as electricity from PG&E and from on-site solar generation.

FUEL CONSUMPTION - ON-ROAD VEHICLES (CONSTRUCTION)

The proposed project would also generate on-road vehicle trips during construction activities (from construction workers, vendors, and haulers). The vast majority of on-road mobile vehicle fuel used during the construction activities during buildout of the General Plan would occur during building construction.

OFF-ROAD VEHICLES (CONSTRUCTION)

Off-road construction vehicles would use diesel fuel during construction activities. A non-exhaustive list of off-road constructive vehicles expected to be used during construction activities includes: cranes, forklifts, generator sets, tractors, excavators, and dozers.

CONCLUSION

Buildout of the General Plan would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel), and from off-road construction activities (e.g. diesel fuel) associated with buildout of the General Plan. Each of these activities would require the use of energy resources. Developers of individual projects within the Planning Area would be responsible for conserving energy, to the extent feasible, and would rely heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

Buildout of the General Plan would be in compliance with all applicable federal, state, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio.

PG&E is expected to achieve at least 60% renewables by 2030, and 100 percent zero-carbon electricity by 2045 (in compliance with SB 100). The Silicon Valley Clean Energy Program (SVCE) is a public, not-for-profit agency that provides clean electricity for 270,000 residential and business customers across 13 Silicon Valley communities, including Milpitas. Since 2017, SVCE has committed over $1 billion to build new renewable energy plants while saving customers more than $50 million in electricity costs. SVCE works closely with PG&E, which delivers electricity over power lines to

homes and businesses. As of 2020, Milpitas customers have a 97% participation rate in the SVCE Program, which further reduces emissions associated with energy consumption.

Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, additional project-specific the sustainability features individual development projects could further energy consumption of individual projects. The proposed project would also be in compliance with the planning documents described previously within this section.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for during General Plan buildout, including during construction, operations, maintenance, and/or removal. Silicon Valley Clean Energy, the local CCA, and/or PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the Planning Area. The City of Milpitas would comply with all existing energy standards, and would not result in significant adverse impacts on energy resources. Furthermore, connections exist between the Planning Area and nearby pedestrian and bicycle pathways, and public transit access exists nearby, reducing the need for local motor vehicle travel. Although improvements to the City's pedestrian, bicycle, and public transit systems would provide further opportunities for alternative transit, the Planning Area would be linked closely with existing networks that, in large part, are sufficient for most residents of the Planning Area and neighboring communities. For the reasons stated above, buildout of the General Plan would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This is a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

Policy CD 11-2: Encourage passive solar design and energy-efficient concepts, including, but not limited to natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.

Policy CD 11-5: Encourage the use of building materials that conserve energy and material resources.

Policy CD 11-11: Continue to apply and expand the Climate Action Plan to increase the energy efficiency of development.

Policy CON 1-1: Ensure that new development is consistent with the energy objectives and targets identified by the City's Climate Action Plan (CAP).

Policy CON 1-2: Ensure all development projects comply with the mandatory energy efficiency requirements of the California Green Building Standards Code (CALGreen).

Policy CON 1-3: Support innovative green building best management practices including, but not limited to, LEED certification, and encourage project applicants to exceed the most current "green" development standards in the California Code of Regulations (CCR), Title 24, as feasible.

Policy CON 1-4: Require large-scale industrial and manufacturing energy users to implement an energy conservation plan as part of the project review and approval process.

Policy CON 1-5: Consider lifecycle costs when identifying opportunities for the replacement and retrofit of energy efficient technologies when upgrading or maintaining City facilities.

Policy CON 1-6: Reduce the City's energy demand by pursuing the use of alternative energy and fuel-efficient City vehicles and equipment, and strive for a zero-emission City vehicle fleet to the extent feasible and practical.

Policy CON 1-7: Support the production of alternative and renewable energy fueling stations in Milpitas.

Policy CON 1-8: Encourage energy efficiency and conservation through public awareness and educational opportunities.

Policy CON 1-9: Encourage site planning and building techniques that promote energy conservation. Where feasible, encourage projects to take advantage of shade, prevailing winds, landscaping, sunscreens, building orientations, and material choices that reduce energy use.

Policy CON 1-10: Encourage distributed energy resources including solar, fuel cells etc. to provide environmental benefits, as well as energy security, and the support of the grid during peak energy use periods.

Policy CON 1-11: Consider incentive programs such as reduced fees, and permit expedition for projects that exceed mandatory energy requirements, incorporate alternative energy technologies, or support the City's energy objectives.

Policy CON 1-12: Promote incentives from local, state, and federal agencies for improving energy efficiency and expanding renewable energy installations.

Policy CON 1-13: Support projects and programs such as appliance upgrades and the use of electric appliances, and energy storage options that reduce the use of and reliance on natural gas.

Action CD-11b: Expand the City's Green Building Program to include addition incentives, above and beyond expedited building permit processing, for projects that incorporate sustainable design approaches and/or elements that exceed local, regional, and state requirements. The incentives may include, but are not limited to, additional maximum development density/intensity, lot coverage, building height; and parking reductions.

Action CD-11c: Provide incentives, including, but not limited to, additional maximum development density/intensity, lot coverage, building height; and parking reductions in community benefits programs of specific plans for projects that implement sustainability measures beyond minimum requirements.

Action CON-1b: Adopt a City Green-Fleet policy to guide the City in purchasing energy efficient and clean emissions vehicles.

Action CON-1c: Display energy conservation and energy efficiency information including state and local programs, community choice aggregation opportunities, and rebate opportunities on the City's web page.

Action CON-1d: Continue to participate in Silicon Valley Clean Energy (SVCE) whereby city-owned facilities, parks, and streetlights will run on renewable energy sources like wind and solar, and educate and encourage Milpitas residents and businesses to participate in Silicon Valley Clean Energy (SVCE) to reduce greenhouse gas emissions and support statewide alternative energy use.

Action CON-1e: Continue to review all new public and private development projects to ensure compliance with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by California Green Building Standards Code (CALGreen), the General Plan, and the Milpitas Municipal Code Chapter 20 Green Building Regulations.

Action CON-1f: Continue to require all development project applications for new buildings to include a completed LEED or CalGreen Mandatory Measures Checklist.

Hazards include man-made or natural materials or conditions that may pose a threat to human health, life, property, or the environment. Hazardous materials and waste present health hazards for humans and the environment. These health hazards can result during the manufacture, transportation, use, or disposal of such materials if not handled properly. In Milpitas, hazards to humans can also occur from natural or human induced wildfire and air traffic accidents.

This section provides a background discussion of the hazardous materials and waste, fire hazards, and hazards from air traffic found in the City of Milpitas. This section is organized with an existing setting, regulatory setting, and impact analysis. Additional analysis related to wildfire hazards is contained in Section 3.16, Wildfire, of this EIR.

No comments were received during the NOP comment period regarding this environmental topic.

3.8.1 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS AND WASTE

Hazardous Materials

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed of. Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

Hazardous Waste

Hazardous waste is the subset of hazardous materials that has been abandoned, discarded, or recycled and is not properly contained, including soil or groundwater that is contaminated with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be hazardous waste. If a hazardous material site is unused, and it is obvious there is no realistic intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosives, explosives, oxidizers, poisons, materials that react violently with water, radioactive materials, and chemicals.

Transportation of Hazardous Materials

The transportation of hazardous materials within California is subject to various Federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code §§ 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials.

Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

HAZARDOUS SITES

Envirostor Data Management System

The DTSC maintains the *Envirostor Data Management System*, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes: Federal Superfund Sites (NPL), State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation / Investigation Sites. The hazardous waste facilities include: Permitted–Operating, Post-Closure Permitted, and Historical Non-Operating.

There are 62 locations with a Milpitas address that are listed in the Envirostor database. Table 3.8-1 lists the location of DTSC sites within Milpitas.

TABLE 3.8-1: MILPITAS SITE CLEANUP AND HAZARDOUS FACILITIES LIST (ENVIROSTOR)

NAME (ENVIROSTAR ID)	*STATUS*	*LOCATION*
CORRECTIVE ACTION SITES		
Great Western Chemical Co (80001721)	Refer: RWQCB	945 Ames Avenue
The Sherwin Williams Company (80001382)	Inactive - Needs Evaluation	805 Sinclair Frontage Road
EVALUATION / INVESTIGATION SITES		
Chevron Service Station/Bulk Plant (60000307)	Refer: 1248 Local Agency	198 Winsor Avenue
Kaiser Experimental Lab (43730001)	Refer: 1248 Local Agency	1600 S. Main Street
KOMAG 4 (43360121)	No Further Action	275 South Hillview Drive
Mony Property (43650001)	No Further Action	1980 Tarob Court
The Apton (60000310)	Refer: 1248 Local Agency	230 North Main Street
NON-OPERATING SITES		
Great Western Chemical Co (CAD095991253)	CLOSED	945 Ames Ave
Ionization Research CO DBA Ecosolutions (CAL000175030)	CLOSED	1823 Houret Court
The Sherwin Williams Company (CAD043720861)	Protective Filer	805 Sinclair Frontage Roadd
SCHOOL CLEANUP / SCHOOL INVESTIGATION		

NAME (ENVIROSTAR ID)	*STATUS*	*LOCATION*
Mabel Mattos Elementary School (6001954)	Active – School Cleanup	1750 McCandless Drive
Centre Pointe Drive (60001989)	Inactive – Withdrawn (School Investigation)	APN 086-33-102 and -103
McCandless Additional Parcels for School Site (60002090)	Inactive – Withdrawn (School Investigation)	Houret Drive and Houret Court
STATE RESPONSE		
Cook Paint And Varnish Company (43280132)	Certified	201 Sinclair Frontage Road
Exide Corporation (43360006)	Certified	700 Montague Expressway
Stonegate Development (43520002)	Certified O&M - Land Use Restrictions Only	1260 Dempsey Road
Target Masters West (60002853)	Active	122 Minnis Circle
TIERED PERMITS		
Akashic Memories Corp., Milpitas (71002324)	No Further Action	304 Turquoise Street
Aptos Corp., Centre Pointe Drive (71003565)	Refer: RWQCB	1557 Centre Pointe Drive
California Micro Devices Corp. (71003411)	No Further Action	215 Topaz Street
CBR Circuits, Inc. (71002650)	Inactive - Needs Evaluation	116 Minnis Circle
Cordova Printed Circuits, Inc. (71003422)	Inactive - Needs Evaluation	1648 Watson Court
DiSC Stampers LLC (71004097)	Inactive - Needs Evaluation	1003 Montague Court
DiSC Stampers LLC (71004121)	Inactive - Needs Evaluation	1103 Montague Court
Dynamic Circuits, Inc. (71003543)	Inactive - Needs Evaluation	1831 Tarob Court
Great Western Chemical Co. – Milpitas (71002637)	Inactive - Needs Evaluation	945 Ames Avenue
Headway Technologies, Inc. (71003583)	Inactive - Needs Evaluation	497 So Hillview Drive
Integrated Packaging Assembly Corp. (71003386)	No Further Action	1503 Gladding Court

NAME (ENVIROSTAR ID)	*STATUS*	*LOCATION*
International Microcircuits, Inc. (71003233)	Inactive - Needs Evaluation	525 Los Coches Street
Intersil Corporation (71002864)	Inactive - Needs Evaluation	1996 Tarob Court
Komag, Inc. #1 (71002660)	Inactive - Needs Evaluation	591 Yosemite Drive
Kovio, Inc. (71002108)	Inactive - Needs Evaluation	233 South Hillview Drive
Kullicke & Soffa Industries, Inc. (71003062)	Inactive - Needs Evaluation	1504 McCarthy Boulevard
Lenthor Engrg., Inc. (71002907)	Inactive - Needs Evaluation	1506 Gladding Court
Linear Technology Corp. (71002682)	Inactive - Needs Evaluation	1630 Mccarthy Boulevard
Linear Technology Corporation, Hillview Facility (71002830)	Inactive - Needs Evaluation	275 S. Hillview Drive
Lite-On, Inc. (71002704)	Inactive - Needs Evaluation	720 S. Hillview
Lockheed Martin Fairchild System (71002678)	Inactive - Needs Evaluation	1801 Mccarthy Boulevard
LSI Logic Corp. (71003548)	Inactive - Needs Evaluation	1601 Mc Carthy Boulevard
Mektec Corp. (71003057)	Inactive - Needs Evaluation	1740 Mccandless Drive
North American Transformer/SPX Corporation (71002400)	Refer: Other Agency	1200 Piper Drive
NTA Industries, Inc. (71003235)	Inactive - Needs Evaluation	398 Railroad Court
Ontrak Systems, Inc. (71003369)	Inactive - Needs Evaluation	77 W. Montague Expressway
PCB Engrg., Inc. (71003125)	Inactive - Needs Evaluation	1478 Gladding Court
Photronics California, Inc. (71002945)	Inactive - Needs Evaluation	1913 Tarob Court
Quartz Internationl, Inc. (71003417)	Inactive - Needs Evaluation	1181 Cadillac Court
Read-Rite Corp. – Milpitas (71002804)	No Further Action	345 Los Coches Street
Saint-Gobain Quartz (71003684)	Inactive - Needs Evaluation	1181 Cadillac Court
Seagate Technology, Inc. (71003026)	Inactive - Needs Evaluation	311 Turquoise Street

NAME (ENVIROSTAR ID)	*STATUS*	*LOCATION*
Sensym, Inc. – Milpitas (71003177)	Inactive - Needs Evaluation	1804 Mccarthy Boulevard
Silicon Microstructures, Inc. (71003092)	Inactive - Needs Evaluation	1701 Mc Carthy Boulevard
Silicon Valley Electro-Plating Corp.(Sepco) (71003131)	Inactive - Needs Evaluation	1486 Gladding Court
Sipex Corporation (71003694)	Inactive - Needs Evaluation	233 S. Hillview Drive
South Valley Circuits, Inc. (71003478)	Inactive - Needs Evaluation	1603 Watson Court
StorMedia, Inc. (71002975)	Refer: Other Agency	690 Gibraltar Drive
That Corporation Integrated Systems (71003703)	Inactive - Needs Evaluation	495 Fairview Way
U-Tech media USA, LLC (71004114)	Inactive - Needs Evaluation	1103 Montague Court
WJ Communications, Inc. (71003552)	Inactive - Needs Evaluation	1530 Mccarthy Boulevard
Xicor, Inc. (71002870)	Inactive - Needs Evaluation	851 Buckeye Court
VOLUNTARY CLEANUP		
Former Stormedia Facility (43360134)	No Further Action	690 Gibraltar Drive
Handcraft Tile (43320043)	Certified	1696 South Main Street
McCarthy Ranch (43010018)	No Further Action	McCarthy Boulevard and Ranch Drive

SOURCE: CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL, ENVIROSTOR DATABASE, 2020.

Cortese List

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. There are no hazardous materials release sites located in the Planning Area listed on the Cortese List.

GeoTracker

GeoTracker is the California Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

Leaking Underground Storage Tanks (LUST)

There are 95 locations with a Milpitas address that are listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). Of the sites identified, 93 of the locations have undergone LUST cleanup and the State has closed the case. One site is open for site assessment, and one site is an open verification monitoring case. Table 3.8-2 lists the name and location for LUSTs in Milpitas.

TABLE 3.8-2: MILPITAS GEOTRACKER DATABASE LUST SITES

SITE NAME	*STATUS*	*ADDRESS*
7-Eleven	Completed - Case Closed	1496 N. Milpitas Boulevard
A Plus Auto	Open - Site Assessment	36 Winsor Street
A Tool Shed	Completed - Case Closed	1300 Main Street S
Aim Developer	Completed - Case Closed	1880 N. Milpitas Boulevard
Arco #2100	Completed - Case Closed	98 S Park Victoria Drive
Arco #2121	Completed - Case Closed	43 S Abbott Avenue
Arco #2121	Completed - Case Closed	43 S Abbott Avenue
Arco #6072	Completed - Case Closed	1575 Landess Avenue
Arco #6072	Completed - Case Closed	1575 Landess Avenue
Aztec Tile	Completed - Case Closed	1126 Yosemite Drive
Baccaglio Site	Completed - Case Closed	1666 S Main Street
Balch Petroleum	Completed - Case Closed	930 Ames Avenue
Beacon - 10 N Main	Completed - Case Closed	10 N. Main Street
Beacon #602	Completed - Case Closed	1885 North Milpitas Boulevard
Bottomly Distributing	Completed - Case Closed	755 Yosemite Drive
Brazil Property	Completed - Case Closed	2124 Old Calaveras Road
Buddy's Floors	Completed - Case Closed	329 Sango Court
California Circle Pump Station	Completed - Case Closed	1735 California Circle
Chevron #9-0670	Completed - Case Closed	230 N Main Street
Chevron #9-2435	Completed - Case Closed	342 W Calaveras Boulevard
Chevron #9-2534	Completed - Case Closed	1490 S. Park Victoria Drive
Container Corporation	Completed - Case Closed	2600 S Hillview Drive
Custom Drywall, Inc.	Completed - Case Closed	1570 Gladding Court
Dart Transportation	Completed - Case Closed	620 E Capitol Avenue
Devcon Construction	Completed - Case Closed	555 Los Coches Street
Di Salvo Trucking	Completed - Case Closed	730 E Capitol
Elmwood Men's Facility	Completed - Case Closed	701 S Abel Street
Exxon #7-8993	Completed - Case Closed	39 S Park Victoria Drive
Federal Express	Completed - Case Closed	620 S Main Street

SITE NAME	*STATUS*	*ADDRESS*
Firestone Store #3673	Completed - Case Closed	1379 S Park Victoria Drive
Fleming Foods	Completed - Case Closed	999 Montague Expressway
Former Doudell Trucking	Completed - Case Closed	555 E. Capital Avenue
Frost All-Cal Trucking	Completed - Case Closed	75 E Montague Expressway
Grace Sierra Chemical	Completed - Case Closed	1001 Yosemite Drive
Hanson Concrete Products	Completed - Case Closed	1 Hanson Court
Herzstein	Completed - Case Closed	1535 Gladding Court
Hulligan Property	Completed - Case Closed	1446 S Main Street
Kingsford Co.	Completed - Case Closed	1601 W Dixon Landing Road
Larson Pallet	Completed - Case Closed	1000 Yosemite Drive
Lee's Imperial Welding, Inc.	Completed - Case Closed	231 Houret Drive
Marylinn Well Pump Station	Completed - Case Closed	350 Marylinn Drive
Mccarthy Ranch	Completed - Case Closed	McCarthy & Magnolia Street Boulevard
Mccarthy Ranch	Completed - Case Closed	1400 Bellew Drive
Mccarthy Ranch	Completed - Case Closed	783 Alviso-Milpitas Road
Mccarthy Ranch At Bellew	Completed - Case Closed	501 Murphy Ranch Road
MCI	Completed - Case Closed	1656 McCarthy Drive
Milpitas Berryessa Pump Stnt.	Completed - Case Closed	731 Folsom Circle
Milpitas Fire Station #1	Completed - Case Closed	25 W Curtis Avenue
Milpitas Fire Station #3	Completed - Case Closed	45 Midwick Drive
Milpitas Fire Station No.2	Completed - Case Closed	1263 Yosemite Drive
Milpitas Greens	Completed - Case Closed	1854 N Milpitas Boulevard
Milpitas Materials	Completed - Case Closed	1125 N Milpitas Boulevard
Milpitas Senior Center	Completed - Case Closed	160 N Main Street
Milpitas Transmission	Completed - Case Closed	130 Winsor Street.
Mission Linen	Completed - Case Closed	1180 Ames Avenue
Mission Pipeline Corp.	Completed - Case Closed	1265 N Milpitas Boulevard
Mobil #10-Jqp (Bp 11223)	Open - Verification Monitoring	97 S. Abbott Avenue
Mobil (Bp 11227)	Completed - Case Closed	1787 S. Main Street
Murphy Ranch Pump Station	Completed - Case Closed	801 Murphy Ranch Road
Oak Creek Pump Station	Completed - Case Closed	1515 McCarthy Boulevard
Old Corporation Yard	Completed - Case Closed	116 N Main Street
Olympian Oil	Completed - Case Closed	800 Ames Avenue
Penske Truck Leasing	Completed - Case Closed	1039 Montague Expressway
Pepsi Cola West	Completed - Case Closed	1800 Milmont Drive
PG&E Facility	Completed - Case Closed	66 Ranch Road
Pinewood Well	Completed - Case Closed	232 Greentree Way
PMT-Union Pacific Railroad	Completed - Case Closed	650 Hammond Avenue
Preston Pipelines	Completed - Case Closed	151 Bothelo Avenue
Private Residence	Completed - Case Closed	Private Residence

SITE NAME	*STATUS*	*ADDRESS*
Prudential Overall Supply	Completed - Case Closed	1429 Milpitas Boulevard
Quikrete	Completed - Case Closed	91 Montague Expressway
Roadway Express, Inc.	Completed - Case Closed	750 E Capitol Avenue
Shapell Industries Of N.Calif.	Completed - Case Closed	100 N Milpitas Boulevard
Shell	Completed - Case Closed	1780 S. Main Street
Shell	Completed - Case Closed	950 E Calaveras Boulevard
Shell	Completed - Case Closed	990 Jacklin Road
Shell	Completed - Case Closed	1310 Alviso-Milpitas Road
Shell	Completed - Case Closed	950 Calaveras
Shell - 12 N Park Victoria	Completed - Case Closed	12 N. Park Victoria Drive
Southern Pacific Pipeline	Completed - Case Closed	Unknown Penitencia Creek
Spring Valley Golf Course	Completed - Case Closed	3441 Calaveras Road
SummitPointe Golf Club	Completed - Case Closed	1200 Country Club
Talley Property	Completed - Case Closed	893 Ames Avenue
Teng Property	Completed - Case Closed	1845 N Milpitas Boulevard
Texaco	Completed - Case Closed	790 Capitol Avenue
Texaco	Completed - Case Closed	92 Serra Way
Truss Comm	Completed - Case Closed	80 Railroad Avenue
U.S. Postal Service	Completed - Case Closed	450 S Abel Street
Union Pacific Railroad	Completed - Case Closed	224 Curtis Avenue
Union Pacific Realty Property	Completed - Case Closed	755 E Capitol Avenue
Unocal #5130	Completed - Case Closed	27 S Park Victoria Drive
Unocal #5130	Completed - Case Closed	27 S. Park Victoria Drive
Unocal #5368	Completed - Case Closed	1640 Milpitas
Unocal #6397	Completed - Case Closed	190 W. Calaveras Boulevard
USA Petroleum #102	Completed - Case Closed	200 Serra Way

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2020.

Permitted Underground Storage Tank (UST)

There are 27 locations with a Milpitas address that have Underground Storage Tanks (UST) that are permitted through the California Water Resources Control Board. Table 3.8-3 lists the name and location of the 27 permitted underground storage tanks in Milpitas.

TABLE 3.8-3: MILPITAS GEOTRACKER DATABASE UST SITES

SITE NAME	*LOCATION*
Abbott Fuel And Food	97 S Abbott Avenue
Arco 02121	43 S Abbott Avenue
Arco 07081	1575 Landess Avenue
At&T California - N2148	76 Carlo Street
B & K Union 76	27 S Park Victoria Drive
Balch Petroleum	930 Ames Avenue
Bottomley Distributing Co	755 Yosemite Drive
Chevron Station #207673	1249 Great Mall Drive
Chevron Station #92534	1490 S Park Victoria Drive
City Gas California Llc	10 N Main Street
City Of Milpitas Corporation Yard	1265 N. Milpitas Boulevard
Coresite Real Estate 1656 McCarthy, L.L.C.	1656 McCarthy Boulevard
Crowne Plaza San Jose ~ Silicon Valley	777 Bellew Drive, A
Df Venture	1551 California Circle
Jacklin Rd Shell #139	990 Jacklin Road
Leshell Inc.	950 E Calaveras Boulevard
McCarthy Ranch Chevron & Car	367 Cypress Drive
McCarthy Blvd Chevron	1625 N McCarthy Boulevard
Milpitas Materials Company	1125 N Milpitas Boulevard
Milpitas Union 76	190 W Calaveras Boulevard
Park Victoria Shell	12 N Park Victoria Drive
Flyers #401	800 Ames Ave
City of Milpitas	Berryessa Pump Station, 731 Folsom Cir.
City of Milpitas	Pinewood Well, 227 Lonetree Ct.
City of Milpitas	Jurgens Pump Station, 345 Jurgens St.
City of Milpitas	Penitencia Pump, 944 La Honda Dr.
Rotten Robbie #66	1787 S Main Street
Spring Valley Golf Course	3441 Calaveras Boulevard
Starlite Shell #182	1780 S Main Street
Tesoro (Speedway) #68162	1885 N Milpitas Boulevard
United #5671	1640 N Milpitas Boulevard

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2020.

Water Board Program Cleanup Sites

There are 49 locations with a Milpitas address that are listed in the GeoTracker database for Water Board Cleanup Sites. 23 of the locations have undergone cleanup and the State has closed the case. There are 26 locations in Milpitas with open cases. Table 3.8-4 lists the location of open and closed cases for Water Board Program Cleanup Sites in Milpitas.

TABLE 3.8-4: MILPITAS WATER BOARD CLEANUP SITES

NAME	*LOCATION*
CLOSED CASES (CLEANUP COMPLETED)	
Quantum Corporation	500 McCarthy
Ford Assembly Plant	1 Great Mall Parkway
Sunnyhills Shopping Center	42-110 Dixon Road
Doudell Trucking	Dixon Landing & Interstate 880
Trade Zone Blvd. - Pick Your Part	595-615 Trade Zone Boulevard
Former Viking Freight System, Inc.	355 Sango Court
Former Great Western Chemical Site	601 Vista Way
Milpitas Senior Housing Project	1600 S. Main Street
Solectron Corporation, Bldg 704	881 Wrigley Way
Pierce & Stevens Chemical Corp	805 Sinclair Frontage Road
LSI Logic Corporation	1601 McCarthy Boulevard
Apton Properties	230 N. Main Street
Dart Transportation Services	620 East Capitol Avenue
Shell	990 Jacklin Road
Trade Zone Blvd. - Trade Zone Blvd.	569-625 Trade Zone Boulevard
Former Trucking Area	1380 Piper Drive
Sinclair Industrial Park	311 Sinclair Frontage Road
Sycamore One	782/788 Sycamore Drive
Sycamore One	782-788 Sycamore Drive
Quantic Industries	Marsh Road & Calaveras Creek
UPRR	650 Hammond Way
Prudential Properties	1051 South Milpitas Boulevard
Plantronics	1715 McCarthy Boulevard
General Electric Calma Site	475, 501, 525 Sycamore Drive
Former Drycleaner*	1481 Landess Ave
Great Western Stinnes Western Chem*	945 Ames Avenue

NAME	*LOCATION*
OPEN – ASSESSMENT AND INTERIM REMEDIAL ACTION	
Integral Communities	1350 McCandless Dr
Siena by Landsea Development	600 Amalfi Loop
Toll Brothers Tarob 3 Development	551 Lundy Place
Murco Property	312 South Main Street
Milpitas Station*	1425 South Milpitas Boulevard
OPEN – INACTIVE CASE	
Fox Hollow - Park Victoria Site	Park Victoria & Fox Hollow
O'Donnell Investment Partners	Wrigley Way X Vista Way
Milpitas City	1265 N Milpitas Boulevard
OPEN – ELIGIBLE FOR CLOSURE	
Victorian Square Cleaners*	1285 East Calaveras Boulevard
OPEN - REMEDIATION	
Ford Cleaners	1822 Milmont Drive
1 Hanson Court	1 Hanson Court
Former Viking Freight System, Inc.	355 Sango Court
Former Dynamic Circuits	1350 South Park Victoria Drive
Palazzo at Montague Village Townhouses (Former North American Transformer)	1200 Piper Drive
North American Transformer*	1200 Piper Drive
OPEN - SITE ASSESSMENT	
Summerhill Apartments Centre Pointe	1646 Centre Pointe Drive
Summerhill Building A (APN 086-33-110)	1646 Centre Pointe Drive
Summerhill Building A (APN 086-33-110)	1646 Centre Pointe Drive
Centre Pointe Business Park	1463-1589 Centre Pointe Drive
Jones Chemical	985 Montague Expressway
Prudential Overall Supply	1429 Milpitas Boulevard N
Eastside San Ramon Partners LLC*	260 S Main Street
450 Montague*	450 Montague Expressway
OPEN – VERIFICATION MONITORING	
Parktown Plaza Shopping Center	1350 South Park Victoria Drive

**LAND USE RESTRICTIONS*

SOURCE: CALIFORNIA WATER RESOURCES CONTROL BOARD GEOTRACKER DATABASE, 2020.

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by the California Integrated Waste Management Board (CIWMB). The SWIS data identifies active, planned and closed sites. The City of Milpitas does not have any solid waste facilities listed in the database. The Newby Island landfill, and Newby Island Compost Facility located near Milpitas on Dixon Landing Road in San Jose previously served the city. Newby Island landfill is a Class III landfill, located on 342 acres with a maximum permitted capacity of 57,500,000 cubic yards, and a remaining capacity of 21,200,000 cubic yards (as of October 2014). The daily capacity of the landfill is 4,000.00 tons per day. While the original plans for the landfill had it scheduled to close in 2025, the operator of the landfill, Republic Services, applied to expand the landfill by increasing its height by 95 feet and allowing it to remain open until January 2041. The current cease of operation date listed by the SWIS is year 2041.

The facility is owned and operated by the International Disposal Corporation, and is inspected monthly. The most recent inspections listed for this facility was conducted 2/26/2020 by the local enforcement agency (City of San Jose) did not list violations or areas of concern.

Since end of 2017, Milpitas solid waste is disposed at Kirby Canyon Landfill in South San Jose. Kirby Canyon Landfill accepts municipal solid waste (MSW) from commercial haulers and the public for recycling and disposal. Each load of material is measured or weighed and specific information about its origin is documented. Daily report of the total tonnage and types of materials received are provided to the Local Enforcement Agency (City of San Jose). Kirby's permits strictly regulate the type and amount of materials that can be received. Liquid waste and hazardous waste such as paints and household cleaners are not accepted at this facility.

The site details for area landfills are listed in Table 3.8-5 below.

TABLE 3.8-5: CIWMB FACILITIES/SITES

SWIM ID	*NAME*	*ACTIVITY*	*REGULATORY*	*STATUS*
43-AN-0014	BFI Newby Island Recyclery	Solid Waste Landfill	Permitted	Active
N/A	Newby Island Compost Facility	Composting Facility (Green Waste)	Permitted	Active
43-AN-0008	Kirby Canyon Landfill	Solid Waste Facility	Permitted	Active

SOURCE: CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY, 2020.

Although the recent inspections for the Newby Island Compost Facility did not list violations or areas of concern, many area residents have had issues with odors from the facility. Stemming from concerns from odors, the City of Milpitas adopted Resolution No. 8463 finding public nuisance and negative environmental effect from operations at Newby Island landfill.

HAZARDS FROM AIR TRAFFIC

The State Division of Aeronautics has compiled extensive data regarding aircraft accidents around airports in California. This data is much more detailed and specific than data currently available from

the FAA and the National Transportation Safety Board (NTSB). According to the California Airport Land Use Planning Handbook (2011), prepared by the State Division of Aeronautics, 21 percent of general aviation accidents occur during takeoff and initial climb and 44.2 percent of general aviation accidents occur during approach and landing. The State Division of Aeronautics has plotted accidents during these phases at airports across the country and has determined certain theoretical areas of high accident probability.

Approach and Landing Accidents

As nearly half of all general aviation accidents occur in the approach and landing phases of flight, considerable work has been done to determine the approximate probability of such accidents. Nearly 77 percent of accidents during this phase of flight occur during touchdown onto the runway or during the roll-out. These accidents typically consist of hard or long landings, ground loops (where the aircraft spins out on the ground), departures from the runway surface, etc. These types of accidents are rarely fatal and often do not involve other aircraft or structures. Commonly these accidents occur due to loss of control on the part of the pilot and, to some extent, weather conditions. (California Division of Aeronautics, 2011).

The remaining 23 percent of accidents during the approach and landing phase of flight occur as the aircraft is maneuvered towards the runway for landing, in a portion of the airspace around the airport commonly called the traffic pattern. Common causes of approach accidents include the pilot's misjudging of the rate of descent, poor visibility, unexpected downdrafts, or tall objects beneath the final approach course. Improper use of rudder on an aircraft during the last turn toward the runway can sometimes result in a stall (a cross-control stall) and resultant spin, causing the aircraft to strike the ground directly below the aircraft. The types of events that lead to approach accidents tend to place the accident site fairly close to the extended runway centerline. The probability of accidents increases as the flight path nears the approach end of the runway. (California Division of Aeronautics, 2011).

According to aircraft accident plotting provided by the State Division of Aeronautics, most accidents that occur during the approach and landing phase of flight occur on the airport surface itself. The remainder of accidents that occur during this phase of flight are generally clustered along the extended centerline of the runway, where the aircraft is flying closest to the ground and with the lowest airspeed. (California Division of Aeronautics, 2002).

Takeoff and Departure Accidents

According to data collected by the State Division of Aeronautics, nearly 65 percent of all accidents during the takeoff and departure phase of flight occur during the initial climb phase, immediately after takeoff. This data is correlated by two physical constraints of general aviation aircraft:

- The takeoff and initial climb phase are times when the aircraft engine(s) is under maximum stress and is thus more susceptible to mechanical problems than at other phases of flight; and

- Average general aviation runways are not typically long enough to allow an aircraft that experiences a loss of power shortly after takeoff to land again and stop before the end of the runway.

While the majority of approach and landing accidents occur on or near to the centerline of the runway, accidents that occur during initial climb are more dispersed in their location as pilots are not attempting to get to any one specific point (such as a runway). Additionally, aircraft vary widely in payload, engine power, glide ratio, and several other factors that affect glide distance, handling characteristics after engine loss, and general response to engine failure. This further disperses the accident pattern. However, while the pattern is more dispersed than that seen for approach and landing accidents, the departure pattern is still generally localized in the direction of departure and within proximity of the centerline. This is partially due to the fact that pilots are trained to fly straight ahead and avoid turns when experiencing a loss of power or engine failure. Turning flight causes the aircraft to sink faster and flying straight allows for more time to attempt to fix the problem (California Division of Aeronautics, 2002).

Local Airport Facilities

There are no private or public airport facilities in the Planning Area.

Major Regional Airport Facilities

San Francisco International Airport (SFO): The San Francisco International Airport is located approximately 25 miles northwest of Milpitas. SFO is the largest airport in the region, and provides a wide range of domestic airline service and all of the region's long-haul international flights. San Francisco serves 68 percent of regional Bay Area air passengers and 43 percent of regional air cargo shipments. The Airport Influence Area (AIA) for SFO includes two parts: Area A and Area B. Area A is the larger of the two areas and encompasses all of San Mateo County. Area B lies within Area A and includes land exposed to aircraft noise above CNEL 65 dB or lying below critical airspace. Additional information on this facility can be found in the City/County Association of Governments of San Mateo County *San Francisco International Airport Comprehensive Airport Land Use Compatibility Plan.*

Metropolitan Oakland International Airport (OAK): The Oakland International Airport is located approximately 25 miles north of Milpitas. Oakland Airport has traditionally been the hub for low cost carriers and a major air cargo center due to operations by FedEx and UPS. Oakland serves 17 percent of Bay Area regional air passengers and 52 percent of air cargo. The Airport's Influence Area (AIA), includes portions of the cities of Oakland, San Leandro, Alameda, Hayward, and small unincorporated areas of Alameda County in the vicinity of the Airport, including San Lorenzo. Additional information on this facility can be found in the Alameda County Airport Land Use Commission's *Oakland International Airport Land Use Compatibility Plan*.

Hayward Executive Airport: The Hayward Executive Airport is located in Alameda County approximately 15 miles southeast of the City of San Francisco on the west side of the City of Hayward. The AIA includes portions of the cities of Hayward, San Leandro, and unincorporated areas

of Alameda County. Additional information on this facility can be found in the Alameda County Airport Land Use Commission's *Hayward Executive Airport Land Use Compatibility Plan.*

Norman Y. Mineta San Jose International Airport (SJC): The San Jose International Airport is located approximately 2 miles South of Milpitas, and is the only Air Carrier airport in Santa Clara County. Air Carrier aviation is defined as scheduled commercial passenger flights and includes scheduled airfreight flights. San Jose International Airport has a full range of aircraft parking/storage facilities, aircraft fueling facilities and aircraft support operations, and is classified as a Medium Hub Airport based on the number of annual passenger enplanements. Medium Hub airports (such as SJC) are those that account for between 0.25 and 1 percent of total U.S. enplanements.

SJC serves 15 percent of the Bay Area regional air passengers and 6 percent of air cargo. The Airport Influence Area extends north to I-237 (approximately 1 mile west of the City of Milpitas). Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *San Jose International Airport Comprehensive Land Use Plan* (CLUP).

Palo Alto Airport (PAO): The Palo Alto Airport is located at the northwestern edge of Santa Clara County, on the western shore of the southern portion of San Francisco Bay (approximately 8 miles west of Milpitas). The Airport is located on 103 acres of land, and is owned by the City of Palo Alto, but managed until 2017 by the County of Santa Clara. It is surrounded by the City of Palo Alto on the west and south, San Francisco bay on the north and east and the City of East Palo Alto in San Mateo County on the northwest. The Airport Influence Area (AIA) is defined as the portion of Palo Alto east of the Bayshore Freeway bounded by U.S. Highway 101 to San Francisquito Creek along the Palo Alto City boundary to Charleston Slough to Barron Creek back to U.S. Highway 101. The AIA is located approximately 6 miles from the City of Milpitas. Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *Palo Alto Airport Comprehensive Land Use Plan* (CLUP).

Moffett Federal Airfield: The Moffett Federal Airfield is Located in the north-central area of Santa Clara County, at the southwest end of San Francisco Bay, adjacent to the cities of Mountain View and Sunnyvale. The Airport is located on 952 acres of land. The Airport is owned by the U.S. Government and operated by NASA Ames Research Center. The Airport is surrounded by San Francisco Bay on the north, the City of Sunnyvale on the east and south, and the City of Mountain View on the south and west, and is approximately 4.5 miles west of the City of Milpitas. The Airport Influence Area extends southeast from the airport and includes the northwestern portion of the City of Sunnyvale (approximately 3 miles west of Milpitas). Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *Moffet Federal Airfield Comprehensive Land Use Plan* (CLUP).

Reid-Hillview Airport: The Reid-Hillview Airport is located in the north-central area of Santa Clara County, in the City of San Jose, at the southeast end of San Francisco Bay (approximately 4 miles southeast of Milpitas). The Airport is located on 179 acres of land surrounded by the City of San Jose, and is owned by the County of Santa Clara. The Airport Influence Area (AIA) is defined as the area bounded by Highway 101 on the west side, Highway 680 to Silver Creek to Story Road on the northwest to White Road on the northeast to Aborn Road on the southeast to Highway 101. The AIA

at its nearest point, is located approximately 4 miles southeast of the City of Milpitas. Additional information on this facility can be found in the Santa Clara County Airport Land Use Commission *Reid-Hillview Airport Comprehensive Land Use Plan* (CLUP).

National Transportation Safety Board Aviation Accident Database

The National Transportation Safety Board Aviation Accident Database identifies three aircraft accidents within Milpitas. The identified incidents include: accidents in 1983, 1984, and 1987. The accidents involved small airplanes making emergency landings, and none of the accidents included fatalities.

FIRE HAZARDS

Fuel Rank

Fuel rank is a ranking system developed by CalFire that incorporates four wildfire factors: fuel model, slope, ladder index, and crown index.

The U.S. Forest Service has developed a series of fuel models, which categorize fuels based on burn characteristics. These fuel models help predict fire behavior. In addition to fuel characteristics, slope is an important contributor to fire hazard levels. A surface ranking system has been developed by CalFire, which incorporates the applicable fuel models and slope data. The model categorizes slope into six ranges: 0-10 percent, 11-25 percent, 26-40 percent, 41-55 percent, 56-75 percent and >75 percent. The combined fuel model and slope data are organized into three categories, referred to as surface rank. Thus, surface rank is a reflection of the quantity and burn characteristics of the fuels and the topography in a given area.

The ladder index is a reflection of the distance from the ground to the lowest leafy vegetation for tree and plant species. The crown index is a reflection of the quantity of leafy vegetation present within individual specimens of a given species. The surface rank, ladder index, and crown index for a given area are combined in order to establish a fuel rank of medium, high, or very high. Fuel rank is used by CalFire to identify areas in the California Fire Plan where large, catastrophic fires are most likely.

The City of Milpitas is primarily designated as moderate by CalFire fuel ranks with portions of the city west of Interstate 880 classified as non-wildland fuel rank. CalFire data for the foothill areas in the eastern portion of the Planning Area (east of Interstate 680) include a preponderance of “high” fuel rank.

Fire Threat

The fuel rank data are used by CalFire to delineate fire threat based on a system of ordinal ranking. Thus, the Fire Threat model creates discrete regions, which reflect fire probability and predicted fire behavior. The four classes of fire threat range from moderate to extreme.

According to the State of California Fire Threat Map, the City of Milpitas is primarily designated as having a no CalFire fire threat or a moderate CalFire fire threat with portions of the city limits east of Interstate 680 classified as “high” fire threat. CalFire data for the foothill areas in the eastern

portion of the Planning Area located in the Sphere of Influence area includes a preponderance of "high" and "very high" fire threat.

Fire Hazard Severity Zones

The state has charged CalFire with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas. In addition, CalFire must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. Figure 3.8-1 shows Fire Hazard Severity Zones near Milpitas.

LOCAL RESPONSIBILITY AREAS

Local Responsibility Areas (LRA) are concentrated in the incorporated areas of Santa Clara County. Milpitas is an LRA that is served by the Milpitas Fire Department. The City of Milpitas and general vicinity is not categorized as a "Very High" FHSZ by CalFire.

STATE RESPONSIBILITY AREAS

State Responsibility are found to the east of the city in the hilly terrain. There are no State Responsibility areas within Milpitas, however areas west of the city within the Sphere of Influence are designated as "high" FHSZ by CalFire.

FEDERAL RESPONSIBILITY AREAS

There are no Federal Responsibility Areas (FRAs) within the vicinity of the Planning Area.

3.8.2 REGULATORY SETTING

FEDERAL

Aviation Act of 1958

The Federal Aviation Act resulted in the creation of the Federal Aviation Administration (FAA). The FAA is charged with the creation and maintenance of a National Airspace System.

Federal Aviation Regulations (CFR, Title 14)

The Federal Aviation Regulation (FAR) establish regulations related to aircraft, aeronautics, and inspection and permitting.

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source

emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

Clean Water Act (CWA)

The CWA, which amended the Water Pollution Control Act (WPCA) of 1972, sets forth the §404 program to regulate the discharge of dredged and fill material into Waters of the U.S. and the §402 National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into Waters of the U.S. The §401 Water Quality Certification program establishes a framework of water quality protection for activities requiring a variety of Federal permits and approvals (including CWA §404, CWA §402, FERC Hydropower and §10 Rivers and Harbors).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active Federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous material releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Environmental Protection Agency

The primary regulator of hazards and hazardous materials is the EPA, whose mission is to protect human health and the environment. The city of Milpitas is located within EPA Region 9, which includes Arizona, California, Hawaii, and New Mexico.

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of "Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire" by the U.S. Departments of the Interior and Agriculture.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (USDOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials (DOE 2002).

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the Federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum Federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

Resource Conservation and Recovery Act

The Resources Conservation and Recovery Act (RCRA) established EPA's "cradle to grave" control (generation, transportation, treatment, storage and disposal) over hazardous materials and wastes. In California, the Department of Toxic Substances Control (DTSC) has RCRA authorization.

STATE

Aeronautics Act (Public Utilities Code §21001)

The Caltrans Division of Aeronautics bases the majority of its aviation policies on the Aeronautics Act. Policies include permits and annual inspections for public airports and hospital heliports and recommendations for schools proposed within two miles of airport runways.

Airport Land Use Commission Law (Public Utilities Code §21670 et seq.)

The law, passed in 1967, authorized the creation of Airport Land Use Commissions (ALUC) in California. Per the Public Utilities Code, the purpose of an ALUC is to protect *public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses* (Pub. Util. Code §21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

Assembly Bill 337

Per AB 337, local fire prevention authorities and the California Department of Forestry and Fire Protection (CalFire) are required to identify Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRA). Standards related to brush clearance and the use of fire resistant materials in fire hazard severity zones are also established.

California Code of Regulations

Title 3 of the CCR pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, the weather, the treated lands and all surrounding properties. Title 3 prohibits any application that would:

- Contaminate persons not involved in the application;
- Damage non-target crops or animals or any other public or private property; and
- Contaminate public or private property or create health hazards on said property.

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8.

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal. Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste.

Title 24 of the CCR is the California Building Standards Code. The California Fire Code is set forth in Part 9 of the Building Standards Code. The CA Fire Code, which is pre-assembled with the International Fire Code by the ICC, contains fire-safety building standards referenced in other parts of Title 24.

Title 26 of the CCR is a medley of State regulations pertaining to hazardous materials and waste that are presented in other regulatory sections. Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Finally, staff training standards are set forth in Title 26.

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation, and maintenance of the state's landfills. The title establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).

California Department of Transportation

Caltrans has adopted policy and guidelines relating to traffic noise as outlined in the Traffic Noise Analysis Protocol (Caltrans 2011). The noise abatement criteria specified in the protocol are the same as those specified by FHWA.

California Government Code Section 65302

This section, which establishes standards for developing and updating General Plans, includes fire hazard assessment and Safety Element content requirements.

California Health and Safety Code

Division 11 of the Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

Division 12 establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings.

Division 20 establishes DTSC authority and sets forth hazardous waste and underground storage tank regulations. In addition, the division creates a State superfund framework that mirrors the Federal program.

Division 26 establishes California Air Resources Board (CARB) authority. The division designates CARB as the air pollution control agency per Federal regulations and charges the Board with meeting Clean Air Act requirements.

California Health and Safety Code §1300 et seq., and CA Building Codes.

State fire regulations are set forth in §13000 *et seq*. of the California Health and Safety Code, which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the CA Building Codes and mandate the abatement of fire hazards.

The code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

California Vehicle Code §31600 (Transportation of Explosives)

This code establishes requirements related to the transportation of explosives in quantities greater than 1,000 pounds, including licensing and route identification.

California Public Resources Code

The State's Fire Safety Regulations are set forth in Public Resources Code §4290, which include the establishment of State Responsibility Areas (SRA).

Public Resources Code §4291 sets forth defensible space requirements, which are applicable to anyone who "*…owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material"* (§4291(a)).

Food and Agriculture Code

Division 6 of the California Food and Agriculture Code (FAC) establishes pesticide application regulations. The division establishes training standards for pilots conducting aerial applications as well as permitting and certification requirements.

State Oversight of Hazards and Hazardous Materials

The DTSC is chiefly responsible for regulating the handling, use, and disposal of toxic materials. The State Water Resources Control Board (SWRCB) regulates discharge of potentially hazardous materials to waterways and aquifers and administers the basin plans for groundwater resources in the various regions of the state. The RWQCB oversees surface and groundwater. Programs intended to protect workers from exposure to hazardous materials and from accidental upset are covered under OSHA at the Federal and California Division of Occupational Safety and Health (Cal/OSHA) and the California Department of Health Services (DHS) at the state level. Air quality is regulated through the CARB and Bay Area Air Quality Management District. The State Fire Marshal is responsible for the protection of life and property through the development and application of fire prevention engineering, education, and enforcement; CalFire provides fire protection services for State and privately-owned wildlands.

CA Fire Code

The California Fire Code (CFC) establishes standards related to the design, construction, and maintenance of buildings. The standards set forth in the CFC range from designing for access by firefighters and equipment and minimum requirements for automatic sprinklers and fire hydrants to the appropriate storage and use of combustible materials

Water Code

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, created the SWRCB and the RWQCB. In addition, water quality responsibilities are established for the SWRCB and RWQCBs.

LOCAL

Certified Unified Program Agencies

Senate Bill 1082 (1993) required the establishment of a unified hazardous waste and hazardous materials management program. The result was Cal EPA's United Program, which consolidates the actions of DTSC, the SWRCB, the RWQCB's, OES, and the State Fire Marshall. DTSC oversees the implementation of the hazardous waste generator and onsite treatment program, one of six environmental programs at the local level, through Certified Unified Program Agencies (CUPAs).

CUPAs have authority to enforce regulations, conduct inspections, administer penalties, and hold hearings. Santa Clara County Department of Environmental Health's Hazardous Materials Division implements the CUPA that has enforcement authority over the City of Milpitas.

Santa Clara County Department of Environmental Health

The Santa Clara County Department of Environmental Health's Hazardous Materials Compliance Division is the CUPA for the City of Milpitas and consolidates, coordinates, and makes consistent the following existing programs:

- California Accidental Release Prevention Program;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (tiered permitting) Programs (California Health and Safety Code, Chapter 6.5);
- Underground Storage Tank Program;
- Aboveground Storage Tank Spill Prevention, Control Countermeasure Plan (California Health and Safety Code, Chapter 6.6.7); and
- Hazardous Materials Business Plan.

Santa Clara County Fire Department

The Santa Clara Fire Department (SCCFD) is an internationally accredited emergency services agency providing emergency services within the adjacent unincorporated portions of the Planning Area. The Department provides hazardous materials inspection, services for building construction, annual building inspection, and hazardous materials regulation. As a Participating agency in the Santa Clara County Department of Environmental Health's Hazardous Materials Compliance Division's CUPA program, the SCCFD administers the following Hazardous Materials programs:

- Hazardous Materials Business Plan (California Health and Safety Code, Chapter 6.95); and
- Underground Storage Tank Program (California Health and Safety Code, Chapter 6.7).

Santa Clara County Office of Emergency Services

The Santa Clara County Office of Emergency Services has adopted an Emergency Operations Plan (EOP), which identifies emergency response programs related to hazardous waste incidents.

Multi-Jurisdictional Local Government Hazard Mitigation Plan for the San Francisco Bay Area

The Association of Bay Area Governments (ABAG) prepared and adopted a Local Hazards Mitigation Plan in 2005. The purpose of the Plan is to serve as a catalyst for a dialogue on public policies needed to mitigate the natural hazards that affect the San Francisco Bay Area. The overall strategy of the Plan is to utilize a multi-jurisdictional effort to maintain and enhance the disaster resistance of the region, and to fulfill the requirements of the Disaster Mitigation Act of 2000 for all local governments to develop and adopt this type of plan.

City of Milpitas Municipal Code

The City of Milpitas Municipal Code is a primary tool that guides development in the city. The Milpitas Municipal Code identifies land use categories, site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The following chapters regulate emergency response and hazardous materials in Milpitas:

- Title V. Chapter 1 – Emergency Organization and Functions. The purpose of this chapter is to provide for the preparation and carrying out of plans for the protection of persons and property within this City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of this City with all other public agencies, corporations, organizations, and affected private persons.

- Title V. Chapter 300 – Fire Code. The purpose of this chapter is to require compliance with the California Fire Code. The California Fire Code regulates and governs the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the City of Milpitas.

City of Milpitas Fire Department Office of Emergency Services

The Milpitas Fire Department Office of Emergency Services (OES) coordinates the City's preparedness efforts to mitigate against, plan for, and recover from the natural and technological disasters. To meet this commitment, the OES trains City employees in disaster planning, keeps the City's multi-hazard emergency plan current, and keeps the Emergency Operation Center in a state of readiness. Additionally, the OES manages the Community Emergency Response Team programs, organizes disaster recovery and reliefs efforts in cooperation with State OES and the Federal Emergency Management Agency, and cooperates closely with the Santa Clara County Office of Emergency Management, all other cities in the County and special districts including the County's flood management agency, the Santa Clara Valley Water District.

City of Milpitas Emergency Operations Plan

The City of Milpitas Emergency Operations Plan (EOP) is to provide a blueprint for emergency management within the city. The goal of the plan is to reduce the loss of lives and property in the event of a disaster. The EOP identifies the City's emergency planning, organization, and response policies and procedures. The EOP also addresses the integration and coordination within other governmental agencies that are required during an emergency.

The EOP is based on the functions and principles of the Standardized Emergency Management Systems (SEMS). The EOP addresses how the City will respond to extraordinary events or disasters, from preparation through recovery. A hazards analysis and probability matrix are also included in the EOP. The responsibilities of each department are identified in matrices, and are based on each identified hazard or threat. The development of departmental Standard Operating Procedures (SOPs) is discussed, including what each department will include in their SOPs.

The Milpitas City Council is responsible for reviewing the entire plan on an annual basis, and coordinating revisions to the plan as required. Records of revision to the plan will be maintained by the Milpitas Office of Emergency Services. The plan may be modified as a result of post-incident analyses and/or post-exercise critiques. It may be modified if responsibilities, procedures, laws,

rules, or regulations pertaining to emergency management and operations change. Those agencies or departments having assigned responsibilities under this plan are obligated to inform Milpitas when changes need to be made.

The EOP addresses a wide spectrum of contingencies, ranging from relatively minor incidents to largescale disasters, such as an earthquake. Some emergencies may be preceded by a buildup or warning period, providing sufficient time to warn the public and implement mitigation measures designed to reduce loss of life, property damage, and effects on the environment. Other emergencies may occur with little or no advance warning, thus requiring immediate activation of the EOP and efficient and coordinated mobilization and deployment of resources.

The City's response to disasters is based on four phases:

1. Preparedness Phase;
2. Response Phase;
3. Recovery Phase; and
4. Prevention/Mitigation Phase.

During each phase, specific actions are taken to reduce and/or eliminate the threat of specific disaster situations. The following individuals, either acting as the Emergency Operations Center Director or on behalf of the Emergency Operations Center Director, or their appointed representatives are authorized to activate the Emergency Operations Center: City Manager, Police Chief, or Fire Chief. The Emergency Services Coordinator will determine the phase and initiate the appropriate level of alert for response agencies, including the activation of the Emergency Operations Center as required.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: General Plan implementation has the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Less than Significant)

Future development, infrastructure, and other projects allowed under the General Plan may involve the transportation, use, and/or disposal of hazardous materials. Hazardous materials are typically used in industrial, and commercial uses, as well as residential uses. Future uses may involve the transport and disposal of such materials from time to time. Future activities may involve equipment or construction activities that use hazardous materials (e.g., coatings, solvents and fuels, and diesel-fueled equipment), cleanup of sites with known hazardous materials, the transportation of excavated soil and/or groundwater containing contaminants from areas that are identified as being contaminated, or disposal of contaminated materials at an approved disposal site. While hazardous materials may be associated with industrial activities, hazardous materials may also be associated with the regular cleaning and maintenance of residential and other less intense uses. Accidental release of hazardous materials that are used in the construction or operation of a project may occur. There is also the potential for accidental release of pre-existing hazardous materials, associated with previous activities on a site.

The use, transportation, and disposal of hazardous materials is regulated and monitored by local fire departments, CUPAs, the Cal OSHA and the DTSC consistent with the requirements of Federal, State, and local regulations and policies. Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In the event of an accidental release of hazardous materials, the local CUPA and emergency management agencies (e.g., Police and Fire) would respond. All future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to hazardous materials. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA.

In addition to the requirements associated with Federal and State regulations and the Municipal Code, the General Plan includes policies and actions to address potential impacts associated with hazardous materials among other issues. These policies and actions in the General Plan would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The General Plan also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance.

As described previously in the regulatory setting, hazardous materials regulations related to the use, handling, and transport of hazardous materials are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code. These laws were established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the state (e.g., Cal OSHA in the workplace or DTSC for hazardous waste) and/or the County. The haulers and users of hazardous materials are listed with the SCCFD and are regulated and monitored by the Santa Clara County. Implementation of Title 49, Parts 171-180, of the Code of Federal Regulations would reduce any impacts associated with the potential for accidental release of hazardous materials. Therefore, implementation of the proposed General Plan policies and actions listed below, as well as Federal and State regulations, would result in a **less than significant** impacts associated with the routine use, transport, storage, or disposal or accidental release of hazardous materials.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA-5.1: Require hazardous waste generated within Milpitas to be disposed of in a safe manner, consistent with all applicable local, state, and federal laws.

Policy SA-5.2: Hazardous materials shall be stored in a safe manner, consistent with all applicable local, state, and federal laws.

Policy SA-5.3: Ensure that businesses in Milpitas that handle hazardous materials prepare and file a Hazardous Materials Business Plan (HMBP), and Hazardous Materials Inventories. The HMBP and Inventory shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

Policy SA-5.4: Use the environmental review process to comment on Hazardous Waste Transportation, Storage and Disposal (TSD) Facilities proposed in the Milpitas Planning Area and throughout the County to request a risk assessment and ensure that potentially significant, widespread, and long-term impacts on public health and safety of these facilities are identified and mitigated, as such impacts do not respect jurisdictional boundaries.

Policy SA-5.5: As feasible, minimize the use of toxic cleaning supplies and products in civic facilities, and minimize the City's use of pesticides, herbicides and fertilizers during landscaping and outdoor municipal operations.

Policy SA-5.6: Encourage residents and businesses to minimize the use of toxic materials and products including the application of pesticides, herbicides and fertilizers.

SAFETY ELEMENT ACTIONS

Action SA-5a: Require that applications for discretionary development projects provide detailed information regarding the potential for the historical use of hazardous materials on the site, including information regarding the potential for past soil and/or groundwater contaminations. If

warranted, identify and require mitigation measures to ensure the exposure to hazardous materials from historical uses has been mitigated to acceptable levels consistent with EPA and/or DTSC standards.

Action SA-5b: Request that the environmental review pursuant to CEQA and/or NEPA of proposed hazardous waste TSD facilities outside of the City's jurisdiction but within the County shall address the following risk assessment components:

- *A worst case description estimating the number, type, scale, scope, location, and operating characteristics of proposed TSD facility(ies) based on the projected volumes and types of hazardous waste;*
- *An assessment of risk resulting from the accidental release, fire, and explosion of hazardous waste. This assessment should take into account all phases of operation including transport, storage, and treatment. The assessment of risk should include the probability of occurrence of an adverse event and magnitude of impact;*
- *Quantitative estimates of toxic air emissions, by applying emissions rates of existing facilities to the future volumes of hazardous waste, and identifying emissions for incinerator facilities under worse case circumstances;*
- *An assessment of non-incineration alternatives for hazardous waste treatment such as chemical dechlorination for the detoxification of PCB's, dioxins, solvents and pesticides; photolysis; and biological treatment; and*
- *Review of the operating characteristics of proposed TSD facilities, taking into account maintenance and operating procedures, emissions monitoring, and safety devices to assure the ongoing enforceability of the mitigating measures that are required.*

Action SA-5c: Continue to train local fire personnel in the specialized handling and cleanup procedures that are required for radioactive, toxic, and hazardous substance spills.

Action SA-5d: Require that Business License applications for businesses that use, store, or sell hazardous materials be reviewed by the County Department of Environmental Health to ensure operations comply with all applicable local, state, and federal laws and do not pose a risk to the public.

Action SA-5e: Support convenient opportunities to properly dispose of hazardous waste by maintaining information on the City's website about convenient drop-off programs for the local disposal of household hazardous waste offered by the Santa Clara County Department of Environmental Health, and other providers.

Action SA-5f: During subsequent contract negotiations with waste haulers, consider adding contractual requirements for the waste hauler to host semi-annual hazardous waste drop-off events in order to provide safe and convenient access to such services by local residents and businesses.

Impact 3.8-2: General Plan implementation has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Less than Significant)

The City of Milpitas is served by the Milpitas Unified School District (K-6 elementary schools, 7-8 and 7-9 middle schools, and 9-12 and 10-12 high schools). Table 3.8-6 provides a summary of the schools serving the City's population.

TABLE 3.8-6: PUBLIC ELEMENTARY, MIDDLE, AND HIGH SCHOOLS SERVING MILPITAS

SCHOOL	*GRADES SERVED*	*ADDRESS*	*ENROLLMENT (2018-2019 SCHOOL YEAR)*	*AVERAGE CLASS SIZE*
ELEMENTARY SCHOOLS				
Alexander Rose Elementary	K-6	250 Roswell Drive	479	25.14
Anthony Spangler Elementary	K-6	140 N. Abbott Avenue	589	26.14
Curtner Elementary	K-6	275 Redwood Avenue	730	26.43
John Sinnott Elementary	K-6	2025 Yellowstone Avenue	738	26.57
Joseph Weller Elementary	K-6	345 Boulder Street	454	28.43
Mabel Mattos Elementary	K-2	1750 McCandless Drive	113	22
Marshall Pomeroy Elementary	K-6	1505 Escuela Parkway	722	25.14
Pearl Zanker Elementary	K-6	1584 Fallen Leaf Drive	635	25.29
Robert Randall Elementary	K-6	1300 Edsel Drive	348	23.14
William Burnett Elementary	K-6	400 Fanyon Street	539	24.71
MIDDLE SCHOOLS				
Rancho Milpitas Middle	7-8	1915 Yellowstone Avenue	717	25.25
Thomas Russell Middle	7-9	1500 Escuela Parkway	825	29.75
HIGH SCHOOLS				
Calaveras Hills High	10-12	1331 E. Calaveras Boulevard	106	9
Milpitas High	9-12	1285 Escuela Parkway	3,177	25.75

SOURCES: CALIFORNIA DEPARTMENT OF EDUCATION, 2018-2019 SCHOOL ACCOUNTABILITY REPORT CARD SEARCH, HTTP://SARCONLINE.ORG/ (ACCESSED JULY 2020).

MILPITAS UNIFIED SCHOOL DISTRICT, 2018-2019 SCHOOL ACCOUNTABILITY REPORT CARDS, HTTPS://WWW. HTTPS://WWW.MUSD.ORG/SARC-REPORTS.HTML (ACCESSED JULY 2020).

The General Plan Land Use Element includes land use designations, but does not propose actual development projects, or businesses. As such, it is not possible to determine if a specific use will result in hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste. The uses and business operations with the highest possibility of having businesses that result in hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste would be manufacturing, and industrial and commercial businesses and uses. Some of these uses could occur within ¼ mile of an existing school facility.. Each of these uses may use a variety of hazardous materials commonly found in urban areas including: paints, cleaners, and cleaning solvents. If handled appropriately, these materials do not pose a significant

risk. The Manufacturing land use designation generally provides for a variety of light and heavy industrial activities, such as manufacturing, processing, packaging, warehousing and distribution. These types of activities may result in nuisance impacts to nearby sensitive receptors. The Light Industrial designation provides for a variety of light industrial uses that as indicated in the land use description are to be nonpolluting and which can co-exist with surrounding land uses and which do not in their maintenance, assembly, manufacturing or operations create smoke, gas, dust, sound, vibration, soot or glare to any degree which might be obnoxious or offensive to persons residing or conducting business in the city.

The proposed General Plan is not anticipated to directly lead to the establishment of new businesses that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste because the General Plan does not approve any specific development project. However, given the unknown nature of future business establishments within the commercial, manufacturing and industrial use areas, the potential for hazardous materials is present.

All hazardous materials would be required to be handled in accordance with Federal, State, and County requirements, which would limit the potential for a project to expose nearby uses, including schools, to hazardous emissions or an accidental release. Hazardous emissions are monitored by the BAAQMD, RWQCB, DTSC and the local CUPA. In the event of a hazardous materials spill or release, notification and cleanup operations would be performed in compliance with applicable Federal, State, and local regulations and policies, including hazard mitigation plans. As part of the development review process, the City's proposed General Plan also requires projects that may result in significant risks associated with hazardous materials to include measures to address and reduce the risks to an acceptable level such that surrounding uses are not exposed to hazardous materials in excess of adopted state and federal standards, and also requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to the SCCFD. Compliance with all existing regulations as well as the proposed General Plan policies and actions related to land use compatibility and hazardous materials would result in a **less than significant** impact related to this topic.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

SAFETY ELEMENT POLICIES

Policy SA-5.1: Require hazardous waste generated within Milpitas to be disposed of in a safe manner, consistent with all applicable local, state, and federal laws.

Policy SA-5.2: Hazardous materials shall be stored in a safe manner, consistent with all applicable local, state, and federal laws.

Policy SA-5.3: Ensure that businesses in Milpitas that handle hazardous materials prepare and file a Hazardous Materials Business Plan (HMBP), and Hazardous Materials Inventories. The HMBP and Inventory shall consist of general business information, basic information on the location, type, quantity, and health risks of hazardous materials, and emergency response and training plans.

Policy SA-5.4: Use the environmental review process to comment on Hazardous Waste Transportation, Storage and Disposal (TSD) Facilities proposed in the Milpitas Planning Area and throughout the County to request a risk assessment and ensure that potentially significant, widespread, and long-term impacts on public health and safety of these facilities are identified and mitigated, as such impacts do not respect jurisdictional boundaries.

Policy SA-5.5: As feasible, minimize the use of toxic cleaning supplies and products in civic facilities, and minimize the City's use of pesticides, herbicides and fertilizers during landscaping and outdoor municipal operations.

Policy SA-5.6: Encourage residents and businesses to minimize the use of toxic materials and products including the application of pesticides, herbicides and fertilizers.

SAFETY ELEMENT ACTIONS

Action SA-5a: Require that applications for discretionary development projects provide detailed information regarding the potential for the historical use of hazardous materials on the site, including information regarding the potential for past soil and/or groundwater contaminations. If warranted, identify and require mitigation measures to ensure the exposure to hazardous materials from historical uses has been mitigated to acceptable levels consistent with EPA and/or DTSC standards.

Action SA-5b: Request that the environmental review pursuant to CEQA and/or NEPA of proposed hazardous waste TSD facilities outside of the City's jurisdiction but within the County shall address the following risk assessment components:

- *A worst case description estimating the number, type, scale, scope, location, and operating characteristics of proposed TSD facility(ies) based on the projected volumes and types of hazardous waste;*
- *An assessment of risk resulting from the accidental release, fire, and explosion of hazardous waste. This assessment should take into account all phases of operation including transport, storage, and treatment. The assessment of risk should include the probability of occurrence of an adverse event and magnitude of impact;*
- *Quantitative estimates of toxic air emissions, by applying emissions rates of existing facilities to the future volumes of hazardous waste, and identifying emissions for incinerator facilities under worse case circumstances;*
- *An assessment of non-incineration alternatives for hazardous waste treatment such as chemical dechlorination for the detoxification of PCB's, dioxins, solvents and pesticides; photolysis; and biological treatment; and*
- *Review of the operating characteristics of proposed TSD facilities, taking into account maintenance and operating procedures, emissions monitoring, and safety devices to assure the ongoing enforceability of the mitigating measures that are required.*

Action SA-5c: Continue to train local fire personnel in the specialized handling and cleanup procedures that are required for radioactive, toxic, and hazardous substance spills.

Action SA-5d: Require that Business License applications for businesses that use, store, or sell hazardous materials be reviewed by Fire Prevention Division to ensure operations comply with all applicable local, state, and federal laws and do not pose a risk to the public.

Action SA-5e: Support convenient opportunities to properly dispose of hazardous waste by maintaining information on the City's website about convenient drop-off programs for the local disposal of household hazardous waste offered by the Santa Clara County Department of Environmental Health, and other providers.

Action SA-5f: During subsequent contract negotiations with waste haulers, consider adding contractual requirements for the waste hauler to host semi-annual hazardous waste drop-off events in order to provide safe and convenient access to such services by local residents and businesses.

Impact 3.8-3: General Plan implementation has the potential to have projects located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Less than Significant)

There are no hazardous materials release sites compiled pursuant to Government Code Section 65962.5 located in the Planning Area.

There are 65 locations with a Milpitas address that are listed in the Envirostor database, including three corrective action sites, six evaluation/investigation sites, three school cleanup/investigation sites, four State Response sites, 42 tiered permit sites, and three voluntary cleanup sites. Of the 65 sites, two are active, eight require no further action, four are certified, two are closed, two are protective filers, 37 are inactive and need evaluation, two are inactive and withdrawn, and eight are referred to the RWQCB, 1248 local agency, or other agency. As previously shown, Table 3.8-1 lists the active sites and the inactive (needs evaluation or action required) sites within Milpitas.

There are 95 LUST locations within Milpitas (i.e. with a Milpitas address) that are listed in the GeoTracker database. 93 of the locations have undergone LUST cleanup and the State has closed the case. Of the remaining two LUST locations within Milpitas, one site is open for site assessment and the other site is an open verification monitoring case. As previously shown, in Table 3.8-2 lists the location of the open and closed cases for LUSTs in Milpitas.

The City of Milpitas does not have any solid waste facilities listed in the SWIS database. The Newby Island Landfill Materials Recovery Facility, and Newby Island Compost Facility are located near Milpitas on Dixon Landing Road in San Jose.

The above-mentioned sites are subject to various Federal and State laws and regulatory agencies, including the CERCLA, EPA, DTSC, and RWQCB. The General Plan does not propose or approve any specific development project, however development allowed by the General Plan could create a hazard to the public or the environment through a disturbance or release of contaminated materials

if the development occurs on or adjacent to contaminated sites without appropriate measures to contain or mitigate the existing contamination. Federal and State regulations ensure that existing hazards, including those associated with known hazardous materials sites, are addressed prior to development. Compliance with Federal and State regulations would ensure that potential impacts associated with the hazardous conditions on sites listed pursuant to Government Code Section 65962.5 would be **less than significant**.

Impact 3.8-4: General Plan implementation is not located within an airport land use plan, two miles of a public airport or public use airport, and would not result in a safety hazard for people residing or working in the project area (Less than Significant)

Hazards related to airports are typically grouped into two categories: air hazards and ground hazards. Air hazards jeopardize the safety of an airborne aircraft and expose passengers, pilots, and crews to danger. Examples of air hazards include tall structures, glare-producing objects, bird and wildlife attractants, radio waves from communication centers, or other features that have the potential to interfere with take-off or landing procedures, posing a risk to aircraft. Ground hazards jeopardize the safety of current and future residents and/or workers in the vicinity of an airport. The most obvious ground hazard is a crash, which may produce a serious, immediate risk to those residing in or using areas adjacent to the airport. Most accidents occur during take-off and landing. Therefore, the higher the density around an airport, including transportation facilities, the higher the risk associated with this type of hazard.

There are no airport facilities located within the Planning Area. The nearest airport facility within the vicinity of the Planning Area is the San Jose International Airport. The San Jose International Airport is located approximately 2 miles south of Milpitas, and is the only Air Carrier airport in Santa Clara County. Air Carrier aviation is defined as scheduled commercial passenger flights and includes scheduled airfreight flights. San Jose International Airport has a full range of aircraft parking/storage facilities, aircraft fueling facilities and aircraft support operations, and is classified as a Medium Hub Airport based on the number of annual passenger enplanements. Medium Hub airports (such as the San Jose International Airport) are those that account for between 0.25 and 1 percent of total U.S. enplanements. SJC serves 15 percent of the Bay Area regional air passengers and 6 percent of air cargo. The Airport Influence Area extends south along SR-87 to just south of I-280 (approximately 3 miles northeast of the City of Milpitas).

The National Transportation Safety Board Aviation Accident Database identifies a total of eight aircraft accidents at the San Jose International Airport. The earliest record for an aircraft accident at the San Jose International Airport is May 30, 1985 (nonfatal). The most recent incident is from June 20, 2009 (nonfatal). The incident prior to this one occurred on March 8, 2001 (nonfatal). Out of the eight recorded aircraft accidents at the airport since 1985, two were fatal accidents causing a total of three deaths (NTSB, 2020). These incidents were small-scale (primarily prop planes, helicopters, and other small planes) occurring during takeoff or landing from San Jose International Airport. None of these accidents occurred within the City of Milpitas.

According to the Comprehensive Land Use Plan for the San Jose International Airport, the City of Milpitas is not located within one of the Airport Safety Zones. Therefore, the General Plan does not include any policies or actions that would impact air hazards or safety and implementation of the General Plan would have a **less than significant** impact with regard to this issue.

Impact 3.8-5: General Plan implementation has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Less than Significant)

The General Plan would allow a variety of new development, including residential, commercial, industrial, and public projects, which would result in increased jobs and population in Milpitas. Road and infrastructure improvements would occur to accommodate the new growth. Future development and infrastructure projects are not anticipated to remove or impede any established evacuation routes within the City. Furthermore, the General Plan does not include land uses, policies, or other components that conflict with adopted emergency response or evacuation plans. However, given that the type, location, and size of future development and infrastructure projects is not known at this time, there is the potential that the City could receive a development proposal that could potentially interfere with an established emergency evacuation route or plan.

According to the Santa Clara County Emergency Operations Plan, Milpitas is a partner of the Santa Clara County Operation Area and the Santa Clara County Emergency Management Organization. Both of these entities provide mutual aid to communities via the Santa Clara County Sheriff's Department, SCCFD, and the State of California Office of Emergency Services. In addition, the City of Milpitas adopted the City of Milpitas EOP, which identifies the City's emergency planning, organization, and response policies and procedures. The EOP also addresses the integration and coordination within other governmental agencies that are required during an emergency. The following individuals, either acting as the Emergency Operations Center Director or on behalf of the Emergency Operations Center Director, or their appointed representatives are authorized to activate the Emergency Operations Center: City Manager, Police Chief, or Fire Chief. The Emergency Services Coordinator will determine the phase and initiate the appropriate level of alert for response agencies, including the activation of the Emergency Operations Center as required.

The General Plan includes a goal to enhance safety throughout the community by ensuring emergency preparedness. The General Plan ensures that the City's emergency access routes, emergency contact lists, and public information regarding designated facilities and routes are regularly reviewed to ensure that up to date information is available to the City and the public in the event of an emergency. Important new critical facilities would be located to ensure resiliency in the event of a natural disaster. Implementation of the proposed General Plan policies and actions listed below would result in a **less than significant** impact related to this topic.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA-3.1: Ensure that new critical facilities in Milpitas are located in areas that minimize exposure to potential natural hazards.

Policy SA-3.2: Ensure that critical facilities are properly supplied and equipped to provide emergency services.

Policy SA-3.3: Ensure that critical facilities are designed and constructed to withstand the "maximum probable" seismic events and still remain capable of service use to provide emergency assistance after a major disaster.

Policy SA-3.4: Support local and regional disaster planning and emergency response planning efforts, and look for opportunities to collaborate and share resources with other municipalities in the region.

Policy SA-3.5: Continue to maintain the City's Emergency Operations Center and conduct regular staff training exercises to ensure that all City staff members, in additional to emergency responders, are adequately trained to fulfill their duties in the event of an emergency.

Policy SA-3.6: Maintain effective mutual aid agreements for fire, medical response, and other functions as appropriate.

Policy SA-3.7: Encourage residents and community leaders to participate in disaster training programs, such as the "Strategic Actions For Emergencies" (S.A.F.E) emergency preparedness program and the Community Emergency Response Team (CERT) program. Where feasible, assist in neighborhood drills and safety exercises to increase participation and build community support.

Policy SA-3.8: Clearly communicate to the public the City's plans, procedures, and responsibilities in the event of a disaster or emergency. Communications and information made available to the public shall be provided in multiple languages to ensure the greatest number of community members have access to this information.

Policy SA-3.9: Encourage residents to register with the Santa Clara County Emergency Alert System (AlertSCC) to ensure notification in the event of an emergency.

Policy SA-3.10: Continue to promote public safety through public education programs, and ensure programs are available and accessible to all segments of the community.

Policy SA-6.2: Ensure that emergency response plans and training programs continue to evolve and are modified in order to protect residents, infrastructure, and facilities during emergencies and extreme weather events.

SAFETY ELEMENT ACTIONS

Action SA-3a: Coordinate with the Santa Clara County Office of Emergency Services (OES) and other local agencies, as necessary, to participate in and implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County.

Action SA-3b: Conduct regular emergency response training exercises and or participate in regional exercises to ensure that emergency response personnel are adequately trained and prepared for emergency situations. Critical facilities within the city should also be annually assessed to ensure they are properly supplied.

Action SA-3c: Publicize and regularly update information at City Hall, other public locations, and via the City website related to emergency and disaster preparedness including evacuation routes and specific steps to take in the event of a flood, fire, earthquake, or other emergency. Improve the visibility and accessibility of emergency and disaster preparedness information on the City's website by making information more prominent, more detailed, and by providing critical information in multiple languages.

Action SA-3d: Provide adequate funding for fire and police services to ensure preparedness of response teams and implementation of emergency response plans.

Action SA-3e: As part of the development review process, consult with the police and fire departments in order to ensure that the project provides adequate emergency access.

Action SA-3f: Encourage schools, neighborhood associations, mobile home park associations, and other interested groups to teach first aid and disaster preparedness, including Community Emergency Response Team (CERT) programs, Map Your Neighborhood programs, and other tools available to neighborhood and community groups to improve disaster preparedness.

Action SA-3g: Periodically review, maintain, and repair City roadways and emergency access routes, and provide signage, where necessary, to clearly identify emergency access routes.

Action SA-6a: When updating master plans for infrastructure, including water supply, flood control and drainage, and critical facilities, review relevant climate change scenarios and ensure that the plans consider the potential effects of climate change and include measures that provide for resilience to climate impacts.

Action SA-6b: Upon the next revision to the Milpitas Multi-Hazard Emergency Plan; identify and designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters. Extend hours at air-conditioned sites during periods of extreme heat or power outage and ensure sites are also supported by backup battery storage or generators.

Impact 3.8-6: General Plan implementation has the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires (Less Than Significant)

Wildfires are a potential hazard to development and land uses located in the foothill and forested areas of the city. The severity of wildfire problems depends on a combination of vegetation, climate, slope, and people. Weather is one of the most significant factors in determining the severity of wildfires; natural fire patterns are driven by conditions such as drought, temperature, precipitation, and wind, and also by changes to vegetation structure and fuel (i.e., biomass) availability. In addition to natural factors such as lightning, human activity is a primary factor contributing to the incidence of wildfires. Campfires, smoking, debris burning, arson, public utility infrastructure, and equipment use are common human-related causes of wildfires.

A 2012 study (Bryant et al), suggested that an increase in wildfire risk to residential property will accompany climate change due to extra-urban growth and increased susceptibility of landscapes

and vegetation to wildfire due to climate change. The Bay Area was identified in the study as one of the more risk-prone areas in California. Generally, a 1- to 7-fold increase in wildfire risk to residential properties across Santa Clara County was shown for the low and high population growth scenarios. Fire risk increase rates are highly localized, and the City of Milpitas and the general vicinity is not categorized as an area where a high degree of increased fire threat from climate change is predicted, due to its urban nature and surrounding urban uses, however the city may experience other local impacts from increased wildfires in surrounding areas including impacts to local air quality.

As shown in Figure 3.8-1, the City of Milpitas and general vicinity are not categorized as "Very High" FHSZ by CalFire. Local Responsibility Areas (LRA) are concentrated in the incorporated areas of Milpitas and is served by the Milpitas Fire Department. State Responsibility are found to the east of the City limits in the hilly terrain within the Sphere of Influence boundary. While there are no State Responsibility areas within the Milpitas City limits, areas east of the city limits within the Sphere of Influence are designated as "high" and "moderate" FHSZ by CalFire. There are no Federal Responsibility Areas within the vicinity of the Planning Area.

Fire threat determinations is a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined to create four threat classes ranging from moderate to extreme. Fire threat can be used to estimate the potential for impacts on various assets and values susceptible to fire. Impacts are more likely to occur and/or be of increased severity for the higher threat classes. According to the State of California Fire Threat Map, the City of Milpitas is primarily designated as having a no CalFire fire threat or a moderate CalFire fire threat with portions of the city limits east of Interstate 680 classified as "high" fire threat. CalFire data for the foothill areas in the eastern portion of the Planning Area located in the Sphere of Influence area includes a preponderance of "high" and "very high" fire threat.

The proposed General Plan includes requirements for adequate water supply and water flow availability, ensuring adequate emergency access, adequate fire protection services, fire safe design site standards, and ensuring public awareness regarding fire safety. All future projects allowed under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with wildland fire hazards as required under CEQA. Therefore, through Implementation of the proposed General Plan policies and actions listed below along with compliance with state and federal requirements would result in a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA-3.1: Ensure that new critical facilities in Milpitas are located in areas that minimize exposure to potential natural hazards.

Policy SA-3.2: Ensure that critical facilities are properly supplied and equipped to provide emergency services.

Policy SA-3.3: Ensure that critical facilities are designed and constructed to withstand the "maximum probable" seismic events and still remain capable of service use to provide emergency assistance after a major disaster.

Policy SA-3.5: Continue to maintain the City's Emergency Operations Center and conduct regular staff training exercises to ensure that all City staff members, in additional to emergency responders, are adequately trained to fulfill their duties in the event of an emergency.

Policy SA-3.6: Maintain effective mutual aid agreements for fire, medical response, and other functions as appropriate.

Policy SA-3.8: Clearly communicate to the public the City's plans, procedures, and responsibilities in the event of a disaster or emergency. Communications and information made available to the public shall be provided in multiple languages to ensure the greatest number of community members have access to this information.

Policy SA-3.9: Encourage residents to register with the Santa Clara County Emergency Alert System (AlertSCC) to ensure notification in the event of an emergency.

Policy SA-4.1: Provide adequate funding for police and fire facilities and personnel to accommodate existing and future citizens' needs to ensure a safe and secure environment for people and property throughout the city.

Policy SA-4.8: Continue to work cooperatively with state, regional, and local public agencies with responsibility for fire protection in hillside areas.

Policy SA-4.9: Ensure that fire and emergency medical services meet existing and future demand by maintaining a response time of four minutes or less for all urban service areas.

Policy SA-4.10: Ensure that adequate water supplies are available for fire-suppression throughout the city. Require development to construct and fund all fire suppression infrastructure equipment needed to provide adequate fire protection services to new development.

Policy SA-6.2: Ensure that emergency response plans and training programs continue to evolve and are modified in order to protect residents, infrastructure, and facilities during emergencies and extreme weather events.

Policy SA-6.8: As feasible support and prioritize adaptation through natural/living measures (e.g., horizontal levees, wetland/marsh/habitat restoration, greenspaces, fire resistant landscaping etc.)

SAFETY ELEMENT ACTIONS

Action SA-3a: Coordinate with the Santa Clara County Office of Emergency Services (OES) and other local agencies, as necessary, to participate in and implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County.

Action SA-3b: Conduct regular emergency response training exercises and or participate in regional exercises to ensure that emergency response personnel are adequately trained and prepared for emergency situations. Critical facilities within the city should also be annually assessed to ensure they are properly supplied.

Action SA-3c: Publicize and regularly update information at City Hall, other public locations, and via the City website related to emergency and disaster preparedness including evacuation routes and specific steps to take in the event of a flood, fire, earthquake, or other emergency. Improve the visibility and accessibility of emergency and disaster preparedness information on the City's website by making information more prominent, more detailed, and by providing critical information in multiple languages.

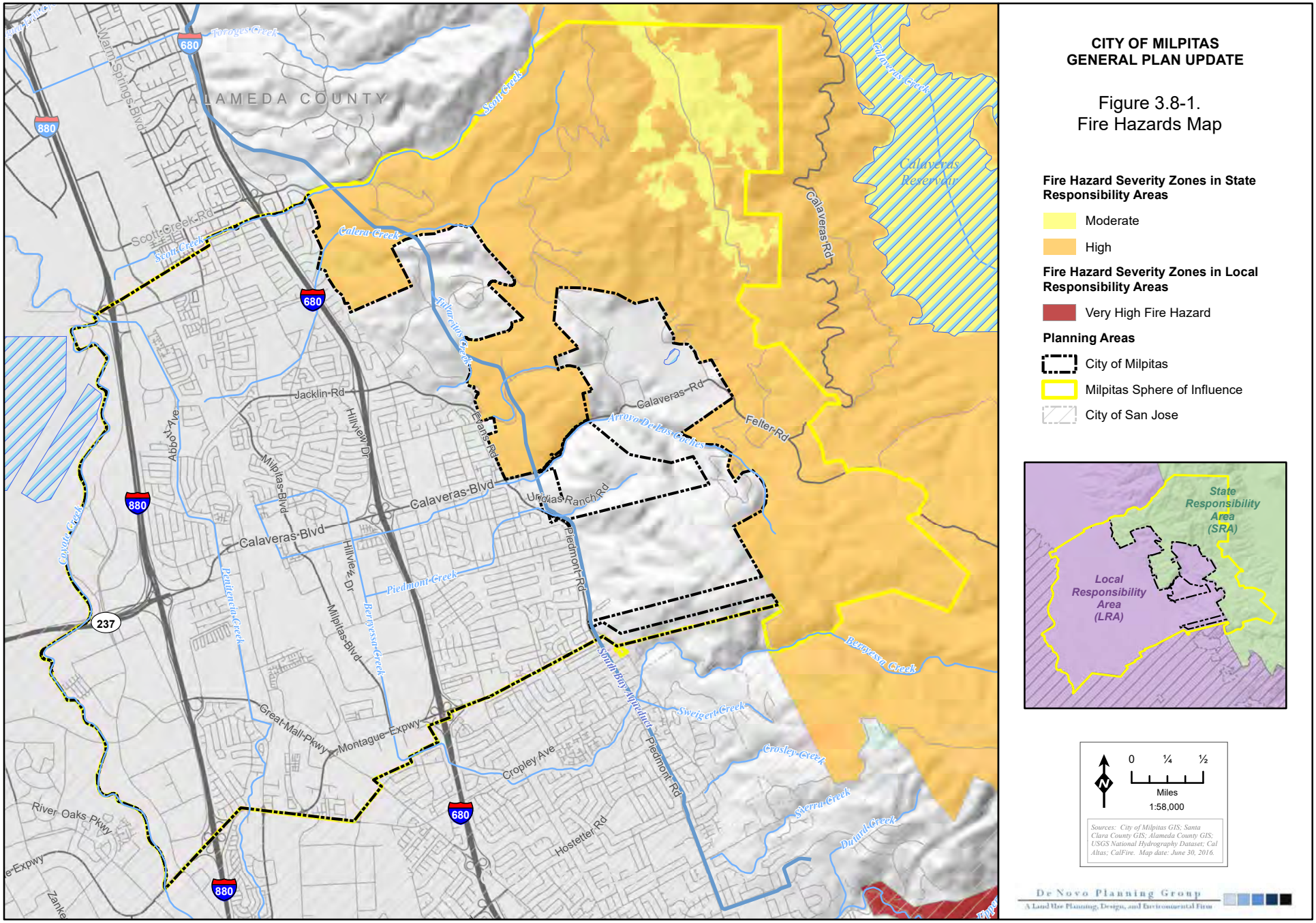
Action SA-3d: Provide adequate funding for fire and police services to ensure preparedness of response teams and implementation of emergency response plans.

Action SA-3e: As part of the development review process, consult with the police and fire departments in order to ensure that the project provides adequate emergency access.

Action SA-4b: As part of the development review process require applications to be reviewed by the Public Works Department and Fire Department in order to ensure that development projects facilitate adequate fire services, access, and fire prevention measures.

Action SA-4c: Conduct periodic Police and Fire Department evaluations that analyze response times and other incident data to ensure adequate services are provided throughout the city.

Action SA-6g: Conduct a climate vulnerability assessment and set preparedness goals and strategies to safeguard human health and community assets susceptible to the impacts of a changing climate (e.g., increased drought, wildfires, flooding, and extreme heat). Incorporate these into all relevant plans, including the Emergency Preparedness Plan, Local Hazard Mitigation Plan, Dam Failure Plan, Climate Action Plan, Watershed Protection Plan, and Energy Assuredness Plan.



CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.8-1.
Fire Hazards Map

Fire Hazard Severity Zones in State Responsibility Areas

- Moderate
- High

Fire Hazard Severity Zones in Local Responsibility Areas

- Very High Fire Hazard

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 ¼ ½
Miles
1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atlas; CalFire. Map date: June 30, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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This section provides a background discussion of the regional hydrology, flooding, water quality, water purveyors, and water sources in Milpitas. This section is organized with an existing setting, regulatory setting, and impact analysis.

No comments were received during the NOP comment period regarding this environmental topic.

KEY TERMS

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is naturally replenished through precipitation, but is naturally lost through evaporation and seepage into soil.

3.9.1 EXISTING SETTING

REGIONAL HYDROLOGY

Milpitas is located at the southern end of the San Francisco Bay. Milpitas is surrounded by several jurisdictions, including the City of San Jose to the west, southwest, and south; the City of Fremont to the northwest; unincorporated Santa Clara County to the east and southeast; and unincorporated Alameda County to the north and northeast. Milpitas is often called the "Crossroads of Silicon Valley" with most of its 13.6 square miles of land situated between two major freeways (I-880 and I-680), State Route 237, and a County expressway. The city lies at the base of the Diablo Range, extending from its foothills on an alluvial plain of the Santa Clara Valley toward San Francisco Bay. Almost half of the city is east of Interstate 680, where elevations vary from about 40 feet mean sea level (MSL) at Evans Road to almost 800 feet at Monument Peak just west of Calaveras Reservoir[1]. Once on the valley floor, the land falls away from the base of the hills toward the west, and approaches sea level along the bay.

The City of Milpitas is located within the San Francisco Bay Region (Region). According to the San Francisco Bay Basin Water Quality Control Plan, the Region is 4,603 square miles and characterized by its dominant feature, 1,100 square miles of the 1,600 square mile San Francisco Bay Estuary (Estuary), the largest estuary on the west coast of the United States, where fresh waters from California's Central Valley mix with the saline waters of the Pacific Ocean. The Estuary conveys the waters of the Sacramento and San Joaquin rivers into the Pacific Ocean. Located on the central

[1] Schaaf & Wheeler Consulting Civil Engineers. July 2013. City of Milpitas Storm Drain Master Plan.

coast of California, the Bay system functions as the only drainage outlet for waters of the Central Valley. It also marks natural topographic separation between the northern and southern coastal mountain ranges (San Francisco Bay Regional Water Control Board, 2007). The Region's waterways, wetlands, and bays form the centerpiece of the United States' fourth-largest metropolitan region, including all or major portions of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

CLIMATE

Climate in the City of Milpitas is characterized by long, warm summers, short, cold winters, and highly seasonal rainfall; nearly all rain falls between fall to early spring with nearly no precipitation during the summer months. Over the course of the year, the temperature varies from 57°F to 84°F with temperatures rarely below 35°F or above 90°F. Mean precipitation within the Proposed Project vicinity is approximately 23 inches per year with the February (5.1 inches of rain) being the wettest month and July and August being the driest (0 inches of rain)

WATERSHEDS

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

The State uses a hierarchical naming and numbering convention to define watershed areas for management purposes. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. Table 3.9-1 shows the primary watershed classification levels used by the State of California. The second column indicates the approximate size that a watershed area may be within a particular classification level, although variation in size is common.

TABLE 3.9-1: STATE OF CALIFORNIA WATERSHED HIERARCHY NAMING CONVENTION

WATERSHED LEVEL	*APPROXIMATE SQUARE MILES (ACRES)*	*DESCRIPTION*
Hydrologic Region (HR)	12,735 (8,150,000)	Defined by large-scale topographic and geologic considerations. The State of California is divided into ten HRs.
Hydrologic Unit (HU)	672 (430,000)	Defined by surface drainage; may include a major river watershed, groundwater basin, or closed drainage, among others.
Hydrologic Area (HA)	244 (156,000)	Major subdivisions of hydrologic units, such as by major tributaries, groundwater attributes, or stream components.
Hydrologic Sub-Area (HSA)	195 (125,000)	A major segment of an HA with significant geographical characteristics or hydrological homogeneity.

SOURCE: CALWATER, CALIFORNIA INTERAGENCY WATERSHED MAPPING COMMITTEE 2008

Hydrologic Region

The Planning Area is located within the San Francisco Hydrologic Region, which covers approximately 2.8 million acres (4,500 square miles) and includes all of San Francisco and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. Significant geographic features include the Santa Clara, Napa, Sonoma, Petaluma, Suisun-Fairfield, and Livermore valleys; the Marin and San Francisco peninsulas; San Francisco, Suisun, and San Pablo bays; and the Santa Cruz Mountains, Diablo Range, Bolinas Ridge, and Vaca Mountains of the Coast Range. While being the smallest in size of the 10 HRs, the region has the second largest population in the State. Major population centers include the cities of San Francisco, San Jose and Oakland.

Hydrologic Unit

The Planning Area is within the Lower Penitencia Creek-Frontal San Francisco Bay Estuaries, Arroyo Hondo, San Francisco Bay Estuaries, and Agua Caliente Creek-Frontal San Francisco Bay Estuaries Hydrology Units (see Figure 3.9-1). The majority of the Planning Area is in the Lower Penitencia Creek-Frontal San Francisco Bay Estuaries hydrologic unit, which covers approximately 30.40 square miles. The northeastern portion of the Planning Area is located in the Arroyo Hondo hydrologic unit, which covers approximately 37.75 square miles. The northwestern portion of the Planning Area is located in the San Francisco Bay Estuaries hydrologic unit, which covers approximately 0.23 square miles. The northern boundary of the Planning Area is located in the Agua Caliente Creek-Frontal San Francisco Bay Estuaries hydrologic unit, which covers approximately 26.39 square miles.

Hydrologic Area

For purposes of planning on a city-wide basis, hydrologic areas are generally considered to be the appropriate watershed planning level. As a planning area becomes smaller the hydrologic area level may be too large in terms of scale, and a hydrologic subarea may be considered more appropriate. The Planning Area is located within the Coyote Creek, Fremont Bayside, and Alameda Creek Hydrologic Areas.

Hydrologic Sub-Area

There are numerous hydrologic sub-areas within and throughout Milpitas and the city's Planning Area. Analysis of hydrologic sub-areas is appropriate for the review of individual projects, but is not appropriate for the watershed analysis of the City's General Plan.

CREEKS AND WATERWAYS

Major waterways in Milpitas include:

- Los Coches Creek;
- Berryessa Creek;
- Coyote Creek;
- Calera Creek;
- Ford Creek;

- Lower Penetencia Creek;
- Piedmont Creek;
- Wrigley Creek;
- Wrigley-Ford Creek; and
- Tularcitos Creek.

The SCVWD is Milpitas' primary partner in the management of local storm water issues. The District's stated mission is to "[manage] an integrated water resources system that includes the supply of clean, safe water, flood protection and stewardship of streams on behalf of Santa Clara County's 1.8 million residents." More specifically, the District manages most of the major drainage-ways in Milpitas including Arroyo de los Coches, Berryessa Creek, Calera Creek, Coyote Creek, Lower Penitencia Creek, Piedmont Creek, and Tularcitos Creek.

GROUNDWATER

The Santa Clara Valley Groundwater Basin (DWR Basin 2-9) provides nearly half of the water used in Santa Clara County. The Santa Clara Valley Groundwater Basin consists of two subbasins: the Santa Clara and Llagas Subbasins. For over 80 years, the Santa Clara Valley Water District (SCVWD) has managed groundwater per statutory authority provided by the Santa Clara Valley Water District Act[2]. The SCVWD operates and maintains a complex infrastructure network, with major features including:

- 10 surface water reservoirs;
- 169,000 acre-feet total reservoir storage capacity;
- 17 miles of raw surface water canals;
- 393 acres of groundwater recharge ponds;
- 91 miles of controlled in-stream recharge;
- 142 miles of pipelines;
- three pumping stations;
- three drinking water treatment plants; and
- Silicon Valley Advanced Water Purification Center.

The Planning Area lies within the Santa Clara Subbasin (DWR Basin 2-9.02). The Santa Clara Subbasin occupies a structural trough parallel to the northwest trending Coast Ranges and covers a surface area of 297 square miles. The Diablo Range bounds the subbasin on the west and the Santa Cruz Mountains forms the basin boundary on the east. The Santa Clara Subbasin extends from the southern edge of San Francisco Bay through the Coyote Valley, with the boundary located near Cochrane Road in Morgan Hill.

[2] Santa Clara Valley Water District Act, Water Code Appendix, Chapter 60.

Local Groundwater Resources

Currently, Milpitas does not use groundwater to meet customer demands under normal conditions and reserves groundwater supply for emergencies in the event that the SFPUC and SCVWD cannot deliver contracted water supplies. The City has two existing groundwater wells, one of which is active. Both wells include chlorine disinfection facilities, but are solely for emergency water supply purposes.

The 1.7 mgd capacity Pinewood Well, located at Pinewood Park, is connected to the City's lowest water pressure zone, Zone SF1, and can supply up to 50 percent of the zone's average daily water demand. The Pinewood Well was used for approximately three months in 1991, with many complaints about taste and odor. The City plans to add onsite iron and manganese treatment to prevent future complaints.

The City also has a 1.5 mgd capacity Curtis Well, located in pressure Zone SF2, along Curtis Avenue. This well is artesian, meaning the well flows by itself, even without a pump. The well is currently inactive, but the City is preparing design drawings for a pump (to pump into the pressurized distribution system) and other improvements. When completed, the Curtis Well will be able to provide up to 50 percent of the average daily water demand of Zone SF2.

WATER QUALITY

Surface water quality is affected by point source and non-point source pollutants. Point source pollutants are those emitted at a specific point, such as a pipe, while non-point source pollutants are typically generated by surface runoff from diffuse sources, such as streets, paved areas, and landscaped areas. Point source pollutants are controlled with pollutant discharge regulations or WDRs. Non-point source pollutants are more difficult to monitor and control although they are important contributors to surface water quality in urban areas.

Stormwater runoff pollutants vary based on land use, topography, the amount of impervious surface, and the amount and frequency of rainfall and irrigation practices. Runoff in developed areas typically contains oil, grease, and metals accumulated in streets, driveways, parking lots, and rooftops, as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas. The highest pollutant concentrations usually occur at the beginning of the wet season during the "first flush."

Santa Clara Valley streams do not receive discharges from industrial or municipal wastewater. Industrial discharges are routed to municipal sanitary sewers and then to regional municipal wastewater treatment plants that discharge treated effluent to the tidal sloughs of San Francisco Bay. In general, pollutant concentrations in stormwater runoff do not vary significantly within an urbanized watershed. However, pollutant concentrations do increase when impervious cover is more than 40 to 50 percent of the drainage area. Runoff volume is the most important variable in predicting pollutant loads.

303(d) Impaired Water Bodies: Section 303(d) of the Federal Clean Water Act requires states to identify waters that do not meet water quality standards or objectives and, thus, are considered

"impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the states to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

The Planning Area has one water body listed on the 2012 Section 303(d) list of impaired water bodies. Coyote Creek (Santa Clara County) is listed as Category 5 segment, which means it is a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.

FLOODING

Flooding is a temporary increase in water flow that overtops the banks of a river, stream, or overwhelms drainage channels and infrastructure to inundate adjacent areas not normally covered by water. Localized flooding may occur in low spots or where infrastructure is unable to accommodate peak flows during a storm event.

Flooding typically occurs within Milpitas due to two interrelated factors:

1. the overflow of major creeks and channels due to limited capacity in relation to flood flows; and

2. inadequate capacity of local drainage facilities.

The Santa Clara Valley Water District (SCVWD) manages the major creeks and channels that flow through the city, while the City of Milpitas maintains the storm drain system and is responsible for managing flow in Wrigley-Ford Creek. Historical flooding has occurred in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, and 2014. In February 1998, localized flooding occurred in the areas of Hillview Drive, S. Milpitas Boulevard at Montague Expressway, and Gladding Court. A storm in March 2014 resulted in power outages and localized flooding in Milpitas, including Dixon Landing Park and Montague Expressway. Additional areas subject to historical flooding, as discussed in further detail in the City of Milpitas 2013 Storm Drain Master Plan, include:

- **Calera Creek** – Storm runoff spills over the south bank upstream of North Park Victoria Road and Interstate 680, flooding the adjacent Higuera Adobe Park. Spills from the south bank downstream of Escuela Parkway flow toward Berryessa Creek, where levees trap the water at Hidden Lake and the Berryessa Pump Staiton. Flood waters that cannot be pumped into Berryessa Creek form a residual floodplain.

- **Los Coches Creek** – Upstream of Interstate 680, the channel does not have sufficient capacity to carry the 100-year discharge. Inadequate channel capacity at Old Piedmont Road causes floodwaters to spill to the south. Additional flows leave the channel upstream of I-680, eventually reaching the highway where they pond.

- **Lower Penitencia Creek** – The SCVWD has lined this creek with concrete and built floodwalls to protect adjacent properties throughout the City of Milpitas. Lower Penitencia Creek overflows to the west from just south of Elmwood Jail north to the Coyote Creek

confluence. However, Highway 880 contains this spill. The east bank levee of Lower Penitencia Creek is fully accredited for published base flood discharges between the confluence with Berryessa Creek and Coyote Creek. Nuisance flooding and 10-year storm event ponding to the top of the curb occur along Abel Street north of Calaveras Boulevard.

- **Berryessa Creek** – This creek floods, on average, once every four years. The storm event in 1998 caused significant damage to homes and automobiles. A 100-year flood associated with this creek is expected to impact development in the area bounded by Lower Penitencia Creek to the west, Calaveras Boulevard to the north, and Montague Expressway to the south. The low area on Watson Court is particularly susceptible to flooding.

- **Wrigley Creek** – This creek overtops its banks at Montague Expressway because of an undersized culvert. Wrigley Creek has insufficient capacity to carry the 100-year flood event west of the Great Mall and runoff would spill into the Great Mall parking lot.

- **Ford Creek** – This creek would overtop its banks in the 100-year storm event and spill toward Lower Penitencia Creek before it is blocked by floodwalls. The inundation would cover the area west of Railroad Avenue north of Carlo Street and along North Abel Street. Localized flooding from a 100- year storm event would also affect Sinnott Lane. In Railroad Avenue, an undersized culvert would cause the creek to overtop its banks in the 100-year storm.

- **Coyote Creek** – In the past, flooding along Coyote Creek has been frequent with 12 major floods between 1903 and 1941. With the construction of Coyote and Anderson Reservoirs, the frequency of flooding has been reduced, but inadequate channel capacities along portions of Coyote Creek have resulted in continued flood damage.

FEMA Flood Zones

FEMA mapping provides important guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). The FEMA FIRM for the Planning Area is shown on Figure 3.9-2.

Areas that are subject to flooding are indicated by a series of alphabetical symbols, indicating anticipated exposure to flood events:

- **Zone A:** Subject to 100-year flooding with no base flood elevation determined. Identified as an area that has a one percent chance of being flooded in any given year.
- **Zone AE:** Subject to 100-year flooding with base flood elevations determined.
- **Zone AH:** Subject to 100-year flooding with flood depths between one and three feet being areas of ponding with base flood elevations determined.
- **Zone AO:** River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet.

- **500-year Flood Zone:** Subject to 500-year flooding. Identified as an area that has a 0.2 percent chance of being flooded in a given year.

As shown on Figure 3.9-2, and Table 3.9-2 below, the City of Milpitas is subject to flooding from both 100- and 500-year storm events. About half of the Planning Area's Valley Floor lies within one of the Special Flood Hazard Areas, including almost all the land west of the Southern Pacific Railroad (and associated levee) which lies within the 100- year Flood Zone, and roughly all land west of Highway 680 is part of the 500-year Flood Zone as delineated by FEMA.

TABLE 3.9-2: FEMA DELINEATED FLOOD ZONES IN MILPITAS

FEMA DESIGNATIONS	*SUM OF ACRES (CITY)*	*SUM OF ACRES (SOI)*	*GRAND TOTAL*
Zone A (100-yr Flood)	136.10	3.82	139.92
Zone AE (100-yr Flood)	321.78	--	321.78
Zone AH (100-yr Flood)	513.56		513.56
Zone AO (100-yr Flood)	580.31		580.31
Zone D (Area of Undetermined Flood Hazard)	1,882.22	4,502.44	6,384.65
(500-yr Flood)	3,697.93		3,697.93
Area of Minimal Flood Hazard	1,506.79	527.31	2,034.10
Area with Reduced Flood Risk due to Levee	46.40		46.40

SOURCE: FEMA'S NATIONAL FLOOD HAZARD LAYER (OFFICIAL) ACCESSED JUNE 17, 2016.

Dam Inundation

Dam failure is the uncontrolled release of impounded water from behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, or sabotage can all cause a dam to fail. Dam failure can result in downstream flooding that can affect property and life. Dam Inundation maps have been required in California since 1972, following the 1971 San Fernando Earthquake and near failure of the Lower Van Norman Dam. The regional vicinity has several dams that are identified to have the potential to inundate portions of the City of Milpitas including:

- Anderson Dam and Reservoir
- Coyote Dam and Reservoir
- Sandy Wool Lake Dam

A brief description of each dam is provided below. Dam inundation areas are shown on Figure 3.9-3.

- The Anderson Dam and Reservoir is the largest of the ten water district reservoirs and provides a reliable supply of water to Santa Clara County. It has a total storage capacity of 89,073 acre-feet. Anderson Dam and Reservoir was built in the 1950s. Currently, a storage restriction of about 45 feet below the dam crest has been put in place to protect the public with a reduced storage capacity of 61,810 acre-feet. Water district staff and the regulatory agencies (California Division of Safety of Dams and the Federal Energy Regulatory

Commission) have approved the restriction and believe that this would prevent the uncontrolled release of water in case of a failure after a major earthquake.

Findings of a seismic stability evaluation performed in 2007 on Anderson Dam indicated that the downstream and upstream embankments could become unstable during a very large magnitude earthquake and the rupture of faults underlying the dam may have adverse impact on the outlet pipes and intake structure. The water district has initiated a capital project, the Anderson Dam Seismic Retrofit Project (ADSRP), to complete the planning, design and construction of the seismic retrofit of the dam.

The project is currently in the design and environmental (CEQA) process phase. The planning studies have been completed with the release of the Planning Study Report. The design phase has started with ongoing phase 1 and 2 geotechnical, geological and other investigation work.

- The Coyote Dam and Reservoir is one of original six reservoirs approved for construction by voters in May 1934. Coyote Dam is an earth and rock dam owned and operated by SCVWD for water supply. The Coyote Reservoir has capacity of 23,244 acre-feet of water with a surface area of 635 acres.

The Anderson Dam and Coyote Dam operate in tandem with controlled releases to minimize the potential for downstream flooding along Coyote Creek.

- The Sandy Wool Dam, is located within Ed Levine Park. According to the Office of emergency Services for Santa Clara County, parts of the city along the Calaveras Road area east of I-680 could be inundated by failure of this dam. The anticipated arrival of a flood wave is 15 minutes from the time of dam failure, affecting a population of about 4,900.

These dams do not have a history of dam failure; however, these dams are identified as having the potential to inundate habitable portions of the Planning Area in the unlikely event of dam failure.

3.9.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the state and nation including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Board, and the Regional Water Quality Control Board. The following is an overview of the federal, state and local regulations that are applicable to the proposed project.

FEDERAL

Clean Water Act

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that

discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The CWA establishes the basic structure for regulating the discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency (EPA) the authority to implement pollution control programs. The statute's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and mandates permits for wastewater and stormwater discharges.

The CWA also requires states to establish site-specific water quality standards for navigable bodies of water and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The following CWA sections assist in ensuring water quality for the water of the United States:

CWA Section 208 requires the use of best management practices (BMPs) to control the discharge of pollutants in stormwater during construction CWA Section 303(d) requires the creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies, and preparation of plans to improve the quality of these water bodies. CWA Section 303(d) also establishes Total Maximum Daily Loads (TMDLs), which is the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards CWA Section 404 authorizes the US Army Corps of Engineers to require permits that will discharge dredge or fill materials into waters in the US, including wetlands.

In California, the EPA has designated the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) with the authority to identify beneficial uses and adopt applicable water quality objectives.

The SWRCB is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits).

Federal Emergency Management Agency

FEMA operates the National Flood Insurance Program (NFIP). Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the California Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

Flood Control Act

The Flood Control Act (1917) established survey and cost estimate requirements for flood hazards in the Sacramento Valley. All levees and structures constructed per the Act were to be maintained locally but controlled federally. All rights of way necessary for the construction of flood control infrastructure were to be provided to the Federal government at no cost.

Federal involvement in the construction of flood control infrastructure, primarily dams and levees, became more pronounced upon passage of the Flood Control Act of 1936.

Flood Disaster Protection Act (FDPA)

The FDPA of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited Federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all Federal agencies and/or federally insured and federally regulated lenders must require flood insurance for all acquisitions or developments in designated Special Flood Hazard Areas (SFHAs) in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE).
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

National Flood Insurance Program (NFIP)

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes: *Better indemnify individuals for flood losses through insurance; Reduce future flood damages through State and community floodplain management regulations; and Reduce Federal expenditures for disaster assistance and flood control.*

While the Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

NPDES permitting authority is administered by the California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB). The Plan Area is in a watershed administered by the SFBRWQCB.

Individual projects in the City that disturb more than one acre would be 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 (BMP) the discharger would use to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment.

Rivers and Harbors Appropriation Act of 1899

One of the country's first environmental laws, this Act established a regulatory program to address activities that could affect navigation in Waters of the United States.

Water Pollution Control Act of 1972

The Water Pollution Control Act (WPCA) established a program to regulate activities that result in the discharge of pollutants to waters of the United States.

STATE

California Fish and Wildlife Code

The California Department of Fish and Wildlife (CDFW) protects streams, water bodies, and riparian corridors through the streambed alteration agreement process under Section 1600 to

1616 of the California Fish and Game Code. The California Fish and Game Code establishes that "an entity may not substantially divert or obstruct the natural flow or substantially change 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" (Fish and Game Code Section 1602(a)) without notifying the CDFW, incorporating necessary mitigation and obtaining a streambed alteration agreement. The CDFWs jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Government Code

Relevant sections of the California Government Code are identified below.

SECTION 65302

Revised safety elements must include maps of any 200-year flood plains and levee protection zones within the Planning Area.

SECTION 65584.04

Any land having inadequate flood protection, as determined by FEMA or DWR, must be excluded from land identified as suitable for urban development within the planning area.

SECTION 8589.4

California Government Code §8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the National Flood Insurance Program (NFIP). NFIP flood zones are areas along streams or coasts where storm flooding is possible from a "100-year flood." In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services (OES). Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems

and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund ("SRF") and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

Consumer Confidence Report Requirements

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

Assembly Bill 162

This bill requires a general plan's land use element to identify and annually review those areas covered by the general plan that are subject to flooding as identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources (DWR). The bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the conservation element of the general plan to identify rivers, creeks, streams, flood corridors, riparian habitat, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management. By imposing new duties on local public officials, the bill creates a State-mandated local program.

This bill also requires, upon the next revision of the housing element, on or after January 1, 2009, the safety element to identify, among other things, information regarding flood hazards and to establish a set of comprehensive goals, policies, and objectives, based on specified information for the protection of the community from, among other things, the unreasonable risks of flooding.

Assembly Bill 70

This bill provides that a city or county may be required to contribute its fair and reasonable share of the property damage caused by a flood to the extent that it has increased the State's exposure to liability for property damage by unreasonably approving, as defined, new development in a previously undeveloped area, as defined, that is protected by a State flood control project, unless the city or county meets specified requirements.

Senate Bill (SB) 610 and Assembly Bill (AB) 901

The State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the

analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

State Updated Model Landscape Ordinance

Under Assembly Bill (AB) 1881, the updated Model Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance (MO). Chapter 9.146 of the Milpitas Municipal Code (Water Efficient Landscape Regulations) includes landscaping water use standards.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An "urban water supplier" is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier's water demand management measures. The urban water supplier 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 Department of Water Resources must receive a copy of an adopted urban water management plan.

San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

State Water Resources Control Board (State Water Board) Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board's role in storm water resources management and evolve the Storm Water Program by a) developing guiding principles to serve as the foundation of the storm water program, b) identifying issues that support or inhibit the program from aligning with the guiding principles, and c) proposing and prioritizing projects that the Water Boards could implement to address those issues.

The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

LOCAL

Santa Clara and Llagas Subbasins 2016 Groundwater Management Plan

The 2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins (GWMP) describes the SCVWD's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas Subbasins, located entirely in Santa Clara County and identified by the Department of Water Resources (DWR) as Basins 2-9.02 and 3-3.01, respectively.

The 2016 GWMP provides information on basin conditions and documents groundwater management goals, strategies, related activities, and metrics for desired basin outcomes. This information supports other District planning efforts including the:

- Urban Water Management Plan (UWMP) that evaluates water supply reliability over a 25-year period;
- Water Supply Master Plan that documents the water supplies, infrastructure, investments, and operating strategies needed to ensuring long-term water supply reliability;
- Annual Protection and Augmentation of Water Supplies (PAWS) Report that presents the basis for recommended groundwater production charges in accordance with the District Act;
- Salt and Nutrient Management Plans that assess the loading of salt and nutrients to groundwater and identify related management strategies; and
- Planning to address specific water management issues that could affect groundwater management.

As required by the Water Code, the SCVWD updates the GWMP at least every five years.

Municipal NPDES Permit Waste Discharge Requirements Order R2-2009-0074 NPDES Permit No. CAS612008 (As Amended by Order R2-2011-0083)

In response to the Federal Clean Water Act, the Santa Clara Valley Urban Runoff Pollution Prevention Program regulates waste dischargers under a National Pollutant Discharge Elimination System (NPDES) Permit administered by the appropriate Regional Water Quality Control Board. Specifically, the municipalities are regulated with regard to their jurisdiction over and/or maintenance responsibility for municipal storm drain systems and watercourses that they own or operate. The NPDES Permit is concerned primarily with regulating trash, pollutants of concern, and excessive hydrologic runoff which can carry sediment and cause flooding.

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharge in the City of Milpitas is subject to the Waste Discharge Requirements (WDRs) of the MS4 Permit (Order Number R2-2009-0074) and NPDES Permit Number CAS612008, as amended by Order Number R2-2011-0083.42

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. Member agencies (Co-permittees) include the cities of Milpitas, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale, the towns of Los Altos Hills and Los Gatos, the County of Santa Clara, and the SCVWD. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The SCVURPPP also promotes valuing stormwater as an important resource.

The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. Total population within the SCVURPPP area is approximately 1.7 million people. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

C.3 Stormwater Handbook

The C.3 Stormwater Handbook was written to help developers, builders, and project applicants include appropriate post-construction stormwater controls in their projects, to meet local municipal requirements and requirements of the Bay Area Municipal Regional Stormwater Permit (MRP). Municipalities covered by the MRP include: Milpitas, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Saratoga, Sunnyvale, Santa Clara County, and the Santa Clara Valley Water District. These municipalities must require post-construction stormwater controls on development projects as part of their obligations under Provision C.3 of the MRP. This permit is a NPDES permit issued by the San Francisco Bay RWQCB,

allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants.

The term "post-construction stormwater control" refers to permanent features included in a development project to reduce pollutants in stormwater and/or erosive flows during the life of the project – after construction is completed. The term "post-construction stormwater control" encompasses Low Impact Development (LID) site design, source control, and treatment measures as well as hydromodification management measures. LID techniques reduce water quality impacts by preserving and re-creating natural landscape features, minimizing imperviousness, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource.

Provision C.3 of the Municipal Regional Stormwater NPDES Permit (MRP) addresses post-construction stormwater requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area. Provision C.3 of the MRP also mandates that new development projects that meet certain criteria: 1) incorporate site design, source control, and stormwater treatment measures into the project design; 2) minimize the discharge of pollutants in stormwater runoff and non-stormwater discharge; and 3) prevent increases in runoff flows as compared to pre-development conditions. Low-impact development (LID) methods are the primary mechanisms for implementing such controls.

City of Milpitas Stormwater Regulations

In order to comply with Provision C.3 of the MRP, project applicants are required to submit a Stormwater Management Plan (SWMP) with building plans, to be reviewed and approved by the City of Milpitas's Public Works Department. The SWMP must be prepared under the direction of and certified by a licensed and qualified professional, which includes civil engineers, architects, or landscape architects. Conditions of approval for development projects include the installation and maintenance of Best Management Practices (BMPs) for site design and stormwater treatment, which must be designed per approved numeric sizing criteria.

Each development project mandated to implement stormwater treatment will also require a Certification of Engineered Stormwater Treatment for New and Redevelopment Projects. The Certification of Engineered Stormwater Treatment for New and Redevelopment Projects may be obtained at the City's Public Works Department. Owners of properties with treatment BMPs will also be required to certify on-going operation and maintenance by filing and recording a covenant submitted to the City.

In addition to implementing LID measures, the MRP also includes a provision to mitigate for hydromodification caused by increases in the volume and frequency of runoff discharges to creeks and streams. Generally, projects in highly developed urban areas are less likely to cause hydromodification. Consequently, projects located in catchment/watersheds that are already more than 65 percent impervious are exempt from this requirement. For projects in these areas that create or replace one acre or more of impervious surfaces, flow controls are required so that post-project runoff does not exceed pre-project runoff rates and durations.

City of Milpitas Urban Water Management Plan (2015)

The purpose of the 2015 Urban Water Management Plan is to ensure efficient use of urban water supplies in Milpitas and promote conservation. The UWMP discusses not only the availability of water but also water use, reclamation, and water conservation activities. The UWMP complies with the Urban Water Management Planning Act (UWMP Act) (California Water Code [CWC] Section 10610 et seq.), the Water Conservation Act of 2009 (CWC Section 10608), and the 20x2020 Water Conservation Plan, which are being implemented by the California Department of Water Resources (DWR).

City of Milpitas Water Master Plan Update (2009)

The City's 2009 Water Master Plan includes a summary of the City's system-wide water demands, the planning criteria used to determine water system demands, the City's water distribution system model, an analysis of the City's water system, and a summary of existing and future water system facilities.

City of Milpitas Municipal Code

Chapter 15, Floodplain Management Regulations, of the City's Municipal Code provides regulations to minimize public and private losses due to flood hazard areas of Milpitas being subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

Chapter 16, Stormwater and Urban Runoff Pollution Control, of the city's Municipal Code provides regulations and gives legal effect to certain requirements of the WDRs and NPDES permit for the discharge of stormwater runoff from the City's municipal separate storm sewer (MS4), issued by the California RWQCB, San Francisco Region to the City of Milpitas. The chapter applies to all water entering the City of Milpitas storm drain system generated on any developed and undeveloped lands lying within the City. Chapter 16 of the Municipal Code ensures consistency with the requirements of federal and state law, and any applicable implementing regulations, as they exist at the time of enactment or as later amended.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

Impact 3.9-1: General Plan implementation could violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality or obstruct implementation of a water quality control plan (Less than Significant)

CONSTRUCTION-RELATED WATER QUALITY IMPACTS

Grading, excavation, removal of vegetation cover, and loading activities associated with future construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

As required by the Clean Water Act, each subsequent development project or improvement project will require an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading and preservation of topsoil. A SWPPP is not required if the project will disturb less than one acre. SWPPPs are designed to control storm water quality degradation to the extent practicable using best management practices during and after construction.

Future development project applicants must submit the SWPPP with a Notice of Intent to the RWQCB to obtain a General Permit. The RWQCB is an agency responsible for reviewing the SWPPP with the Notice of Intent, prior to issuance of a General Permit for the discharge of storm water during construction activities. The RWQCB accepts General Permit applications (with the SWPPP and Notice of Intent) after specific projects have been approved by the lead agency. The lead agency for each specific project that is larger than one acre is required to obtain a General Permit for discharge of storm water during construction activities prior to commencing construction (per the Clean Water Act).

The General Plan sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. However, each future project must include detailed project specific drainage plans that control storm water runoff and erosion, both during and after construction. The Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each future project that disturbs an area one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion.

NEW DEVELOPMENT-RELATED WATER QUALITY IMPACTS

New development and infrastructure improvements projects allowed under the proposed General Plan could introduce constituents into the storm water system that are typically associated with urban runoff. These constituents include sediments, petroleum hydrocarbons, pesticides, fertilizers, and heavy metals such as lead, zinc, and copper. These pollutants tend to build up during the dry months of the year. Precipitation during the early portion of the wet season (generally from November to April) washes away most of these pollutants, resulting in high pollutant concentrations in the initial wet weather runoff. This initial runoff is referred to as the "first flush" of storm events. Subsequent periods of rain would result in less concentrated pollutant levels in the runoff.

The majority of development allowed under the General Plan would be within areas currently developed with urban uses (as described in the Land Use Element and associated General Plan Existing Conditions Report), and the amount and type of runoff generated by various future development and infrastructure projects would be similar to existing conditions. However, new development and infrastructure projects have the potential to result in increases in the amount of impervious surfaces throughout Milpitas. Future increases in impervious surfaces would result in increased urban runoff, pollutants, and first flush roadway contaminants, as well as an increase in nutrients and other chemicals from landscaped areas. These constituents could result in water quality impacts to onsite and offsite drainage flows to area waterways.

Waters that are listed under Section 303(d) of the CWA are known as "impaired." The only impaired water body listed on the 2012 Section 303(d) list of impaired water in the vicinity of the Planning Area is Coyote Creek. Coyote Creek (Santa Clara County) is listed as Category 5 segment, which means it is a water segment where standards are not met and a total maximum daily load (TMDL) is required, but not yet completed, for at least one of the pollutants being listed for this segment. The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

Storm water runoff may play a role in the water quality impairments described above. Runoff that occurs as overland flow across yards, driveways, and public streets is intercepted by the storm water drainage system and conveyed to local drainages before eventually being routed to the

Pacific. This storm water can carry pollutants that can enter the local waterways and result in the types of water quality impairments described above. Common sources of storm water pollution in the City include litter, trash, pet waste, paint residue, organic material (yard waste), fertilizers, pesticides, sediments, construction debris, metals from automobile brake pad dust, air pollutants that settle on the ground or attach to rainwater, cooking grease, illegally dumped motor oil, and other harmful fluids.

Due to future development and infrastructure projects, the overall volume of runoff in Milpitas could be increased compared to existing conditions. If the City's drainage system is not adequately designed, General Plan buildout could result in localized higher peak flow rates. Localized increases in flow would be significant if increases exceeded system capacity or contributed to bank erosion.

The General Plan sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. However, each future development and infrastructure project is required to prepare a detailed project specific drainage plan, Water Quality Management Plan, and a Storm Water Pollution Prevention Plan (SWPPP) that will control storm water runoff and erosion, both during and after construction. If the project involves the discharge into surface waters the project proponent will need to acquire a Dewatering permit, NPDES permit, and Waste Discharge permit from the RWQCB and comply with all storm water sewer system (MS4) requirements.

As described above, under the Regulatory Setting, the City is required to implement a range of measures and procedures when reviewing new development and infrastructure projects.

San Francisco Bay Basin (Region 2) Water Quality Control Plan. The Basin Plan includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

Santa Clara Valley Urban Runoff Pollution Prevention Program. The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

Stormwater Management Plan. The City of Milpitas covered by the Bay Area Municipal Regional Stormwater Permit (MRP), which is a NPDES permit issued by the San Francisco Bay RWQCB, allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants. In order to comply with Provision C.3 of the MRP, project applicants are required to submit a Stormwater Management Plan (SWMP) with building plans, to be reviewed and approved by the City of Milpitas's Public Works Department. The SWMP must be prepared under the direction of and certified by a licensed and qualified professional, which includes civil engineers, architects, or landscape architects. Conditions of approval for development projects include the installation and maintenance of Best Management Practices (BMPs) for site design and stormwater treatment, which must be designed per approved numeric sizing criteria.

Chapter X-16 of the City's Municipal Code provides regulations and gives legal effect to certain requirements of the Waste Discharge Requirements and National Pollutant Discharge Elimination System permit for the discharge of stormwater runoff from the City's municipal separate storm sewer (MS4), issued by the California Regional Water Quality Control Board, San Francisco Region to the City of Milpitas.

- Section X-16-5 makes it unlawful to discharge non-stormwater or contaminated stormwater into any City storm drain or watercourse.

- Section X-16-6 requires regulated projects to design and construct Low Impact Development source control, site design, and stormwater treatment measures in order to reduce water quality impacts of urban runoff from the entire project site for the life of the project.

- Section X-16-7 requires that property owners, its administrators, or any other persons, including homeowners associations, take the necessary actions to ensure that permanent stormwater treatment measures are properly maintained so that they continue to operate as originally designed and approved for the life of the development.

- Section X-16-12 specifies watercourse protection requirements requiring properties adjacent to a watercourse to comply with the "Guidelines and Standards for Land Use Near Streams" prepared by the SCVWD and Water Resources Collaborative for all development, construction, and maintenance activities conducted on lands adjacent to watercourses.

- Section X-16-13 specifies industrial and commercial site controls to minimize the discharges of pollutants to stormwater and require any accidental discharge to storm drain system or watercourses be reported to the City.

Compliance with existing City and County construction and stormwater management codes and the SWMP, as outlined above, would reduce these potential impacts related to stormwater quality. In addition, prior to the issuance of grading permits, each site developed under the proposed General Plan would be required to submit a SWPPP and SWMP to the City for approval.

While the primary regulatory mechanisms for ensuring that future development and infrastructure projects do not result in adverse water quality impacts are contained in the Milpitas Municipal Code, the SCVURPPP, and the SWMP, the City of Milpitas has developed the General Plan to include additional policies and actions that, when implemented, will further reduce water pollution from construction, new development, and new infrastructure projects, and protect and enhance natural storm drainage and water quality features. The policies and actions identified below include numerous requirements that would reduce the potential for General Plan implementation to result in increased water quality impacts. Actions by the City during the development review process require the review of development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. In addition, compliance with the Clean Water Act and regulations enforced by the Regional Water Quality Control Board would ensure that construction-related impacts to water quality are minimized and future projects comply with all applicable laws and regulations.

The City manages local storm drain facilities and the SCVWD is responsible for regional flood control planning within the County. Provision of stormwater detention facilities as needed would reduce runoff rates and peak flows. The General Plan policies and actions listed below include policies aimed to enhance stormwater quality and infiltration as well as actions to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure off-site runoff is not increased beyond pre-development levels. Existing regulatory requirements that manage water quality, and implement the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, WQMPs, SWPPPs, and to implement Best Management Practices. These regulatory requirements are intended to ensure that water quality does not degrade to levels that would violate water quality standards. Through implementation of the General Plan policies and actions listed below, implementation of the Milpitas Municipal Code requirements identified above, compliance with mandatory Federal and State regulations, and compliance with the existing regulations for the SCVURPPP would ensure that impacts to drainage patterns and water quality would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

PUBLIC SAFETY ELEMENT POLICIES

Policy SA 2-2: Coordinate with regional and local agencies and private landowners to plan, finance, construct, and maintain local and regional stormwater management and conveyance facilities.

Policy SA 2-3: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for off-site flooding.

UTILITIES AND COMMUNITY SERVICES ELEMENT POLICIES

Policy UCS 1-1: Provide adequate public infrastructure (i.e., street, sewer, water, and storm drain systems) to meet the needs of existing and future development.

Policy UCS 1-2: Require development and long-term planning projects to be consistent with all applicable City infrastructure plans, including the Water Master Plan, Urban Water Management Plan (UWMP), the Sewer Master Plan, the Sewer System Management Plan, the Green Infrastructure Plan, and the Capital Improvement Program.

Policy UCS 1-3: Require all future development projects to analyze their infrastructure and service impacts and either demonstrate that the City's existing infrastructure, public services, and utilities can accommodate the increased demand for services, and that service levels for existing users will not be diminished or impaired, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-1: Maintain and improve Milpitas's storm drainage facilities.

Policy UCS 4-2: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

Policy UCS 4-3: Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-4: Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Policy UCS 4-5: Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

Policy UCS 4-6: Applicable projects shall minimize directly connected impervious areas by limiting the overall coverage of paving and roofs, directing runoff from impervious areas to adjacent pervious areas, and selecting permeable pavements and surface treatments.

Policy UCS 4-8: Coordinate directly with the Santa Clara Valley Water District to incorporate recreational trails and parkway vegetation design into open stormwater facilities and creek corridors to the greatest extent feasible.

Policy UCS 4-9: Maintain drainage channels in a naturalized condition with riparian corridors and wetland where appropriate, incorporating recreational trails, parkway vegetation, and other amenities and ensuring that vegetation does not reduce channel capacity. Where possible, set back development from these areas sufficiently to maximize habitat values.

Policy UCS 4-12: Projects accommodating outdoor activities, including work areas, storage areas or other areas that are potential sources of stormwater pollutants, shall incorporate measures to control those pollutant sources to the maximum extent practicable.

Policy UCS 4-13: Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

Policy UCS 4-14: Construction sites shall incorporate measures to control erosion, sedimentation, and the generation of runoff pollutants to the maximum extent practicable. The design, scope and location of grading and related activities shall be designed to cause minimum disturbance to terrain and natural features. (Title II, Chapter 13 of the Municipal Code).

Policy UCS 4-15: Minimize the use of pesticides that may affect water quality.

PUBLIC SAFETY ELEMENT ACTIONS

Action SA 2a: As part of the development review process continue to require new developments to prepare hydraulic and storm drainage studies as necessary to define the net increase in storm water run-off resulting from construction and operation, and require mitigation to reduce identified impacts. Drainage and grading plans shall identify BMP protections and include standards established and recommended by the City that shall be incorporated into development.

Action SA 2e: Periodically Review the City of Milpitas Storm Drain Master Plan, and update as necessary, to ensure that the Plan includes a comprehensive list of capital improvements needed to maintain recommended levels of protection against flooding and stormwater runoff. Continue to seek new revenue streams to fund the necessary improvements and maintenance of the City's storm drainage infrastructure.

UTILITIES AND COMMUNITY SERVICES ELEMENT ACTIONS

Action USC 4e: Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

Action USC 4f: Work cooperatively with local, state, and federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP).

Impact 3.9-2: General Plan implementation could result in the depletion of groundwater supplies or interfere substantially with groundwater recharge or conflict with a groundwater management plan (Less than Significant)

The City of Milpitas is underlain by the Santa Clara Subbasin (DWR Bulletin 118 Basin 2-9.02), which is a subbasin of the Santa Clara Valley Groundwater Basin (DWR Bulletin 118 Basin 2-9). The Santa Clara Subbasin has a total estimated storage capacity of 1.9 million Acre-Feet (AF); however, only a fraction of this water can be extracted practically using wells and without causing

undesirable results like land subsidence and salt water intrusion. The Subbasin underlies a relatively flat valley and consists of unconsolidated alluvial sediments.

Due to different hydrogeologic, land use and water supply management characteristics, the Santa Clara Subbasin is subdivided into two groundwater management areas (GMA): the Santa Clara Plain and Coyote Valley. The Santa Clara Plain covers 280 miles of the subbasin, extending from southern San Francisco Bay to the Coyote Narrows, near Metcalf Road. The Coyote Valley is much smaller than the Santa Clara Plain, covering 17 square miles of the subbasin from Coyote Narrows to the boundary with the Llagas Subbasin. The Planning Area is located within the Santa Clara Plain groundwater management area.

The Santa Clara Subbasin is a trough-like depression filled with Quaternary alluvium deposits of unconsolidated gravel, sand, silt and clay that eroded from adjacent mountain ranges by flowing water and were deposited into the valley. The thickness of the aquifer materials in the Santa Clara Plain ranges from about 150 feet near the Coyote Narrows to more than 1,500 feet in the interior of the subbasin. The alluvium thins towards the western and eastern edges of the Santa Clara Plain. The central portion of the Santa Clara Plain contains a laterally extensive, low permeability aquitard that restricts the vertical flow of groundwater. Groundwater movement generally follows surface water patterns flowing from the interior of the subbasin northerly toward San Francisco Bay.

The long-term average groundwater pumping in the Santa Clara Subbasin is 103,000 Acre-Feet per Year (AFY), including both the Santa Clara Plain and Coyote Valley GMAs. Average 2003 to 2012 groundwater pumping in the Santa Clara Plain was 92,000 AFY, with maximum and minimum annual pumping of 110,000 AF and 71,000 AF, respectively[3]. Nearly all groundwater used in the Santa Clara Plain (99 percent) is for municipal and industrial uses with only 1 percent for agriculture and domestic purposes. Pumping by water retailers accounts for over 90 percent of pumping in the Santa Clara Plain.

Recharge within the Santa Clara Subbasin generally occurs along the margins and southern portion of the subbasin where coarse-grained sediments predominate. Recharge areas are primarily comprised of high permeability aquifer materials such as sands and gravels that allow surface water to infiltrate into the aquifers. Recharge sources in the Santa Clara Subbasin include SCVWD managed recharge and natural, or uncontrolled, recharge from the deep percolation of rainfall, septic system and irrigation return flows, and natural seepage through creeks. Natural, or uncontrolled, recharge from precipitation, return flows, seepage from creeks, and mountain front recharge is estimated to range between 15,000 and 61,000 AFY for the Santa Clara Subbasin.

The SCVWD's managed recharge programs uses both runoff captured in local reservoirs and imported water delivered by the raw water conveyance system to recharge groundwater through more than 390 acres of recharge ponds and over 90 miles of local creeks. According to the 2016

[3] SCVWD. *2016 Groundwater Management Plan*. Accessed July 2020.

Groundwater Sustainability Plan, no District recharge ponds/facilities or instream recharge areas exist within the Planning Area boundaries. The majority of these recharge ponds/facilities and instream recharge areas are located in the southwestern portion of the County south of Interstate 280 near the cities of San Jose, Los Gatos, Campbell, Saratoga, and Cupertino. The majority of the Planning Area is within the Santa Clara Plain Confined Area However, it should be noted that the land generally east of Interstate 680 and land generally north of Calera Creek are located within the Santa Clara Plain Recharge Area. The SCVWD's managed recharge systems in the Santa Clara Subbasin are summarized below in Table 3.9-3.

TABLE 3.9-3: SANTA CLARA SUBBASIN MANAGED RECHARGE FACILITY SUMMARY

MANAGED RECHARGE SYSTEM	*APPROXIMATE RECHARGE CAPACITY ACRE-FEET PER YEAR (AFY)*	*WATER SUPPLY SOURCES*	*YEAR OPERATION BEGAN*
Guadalupe	25,000 AFY	Local watersheds, State Water Project (SWP), and Central Valley Project (CVP)	1932
Los Gatos	30,000 AFY	Local watersheds, SWP, CVP	1934
Penitencia	7,000 AFY	Local watersheds, SWP	1934
West Side	15,000 AFY	Local watersheds, SWP, CVP	1935
Coyote	27,000 AFY	Local watersheds, CVP	1934

SOURCE: SANTA CLARA VALLEY WATER DISTRICT. 2016 GROUNDWATER MANAGEMENT PLAN. ACCESSED JULY 28, 2020.

The SCVWD actively monitors groundwater elevations to evaluate current groundwater conditions and land subsidence, optimize recharge efforts, access groundwater storage, and support groundwater management efforts. According to the July 2020 Groundwater Condition Report, the Santa Clara Valley Groundwater Basin's groundwater storage is above average and the June 2020 groundwater levels at the Milpitas Santa Clara Plain Well (06S01W24H015) were slightly below the 5-year average. Overall, the 2020 managed recharge to date for the Santa Clara Plain is 22,300 AF while the 2020 groundwater pumping to date is 29,500 AF.

The Sustainable Groundwater Management Act (SGMA) defines sustainable yield as the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result. According to the 2016 Groundwater Management Plan, the annual Santa Clara Plain pumping should not exceed 200,000 AF. However, the District does not manage to a particular value for sustainable yield, but instead manages groundwater to maintain sustainable conditions through annual operations and long-term water supply planning.

The City of Milpitas does not directly provide water service to its residents. Rather, the City purchases treated potable water from two wholesalers, the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD).

On June 2, 2009, the City entered into a 25-year Water Supply Agreement with the San Francisco Public Utilities Commission (SFPUC). This agreement affirms the City's perpetual right to purchase up to 9.23 MGD of treated potable water unless SFPUC has a water shortage. In 2015, the City of Milpitas only purchased 5.24 MGD of potable water from the SFPUC. The SFPUC service area includes all of the land east of Interstate 680 and the land generally bound by Interstate 880,

Calaveras Boulevard and Interstate 680. A large portion of the service area is rural residential and agricultural land located within the SOI boundary outside of the City limits. The majority of the service area within the City limits is currently developed with residential, institutional, commercial, and industrial uses with few vacant parcels remaining.

According to SFPUC's 2015 Urban Water Management Plan, the water supply is predominantly (85 percent) snowmelt from the Sierra Nevada and Tuolumne River watershed, delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by SFPUC from its local watersheds and facilities in Alameda County. Approximately 15 percent of the water supply is drawn from the surface waters and reservoirs in the Alameda and Peninsula watersheds. Table 3.9-4 below illustrates SFPUC's projected water supply and demand for City of Milpitas.

TABLE 3.9-4: SFPUC PROJECTED POTABLE WATER SUPPLY FOR MILPITAS (MG/YEAR)

YEAR	*PROJECTED DEMAND*	*PROJECTED SUPPLY*
2035	8.79	9.23
2040	8.79	9.23

SOURCE: SFPUC 2015 URBAN WATER MANAGEMENT PLAN.

Approximately 40% of the City's potable water was from SCVWD in 2015, which is an increase from 25% from SCVWD in 2010. (Milpitas UWMP, 2016). The City began receiving treated surface water from SCVWD in August 1993 under a September 1984 contract between the City and SCVWD. The supply delivery is adjusted annually based on a binding 3-year annual delivery schedule. The City's annual purchase must be at least 90% of the delivery schedule and the City's monthly "supply guarantee" is at least 15% of the annual delivery schedule. SCVWD provides treated water from its Penitencia and Santa Teresa treatment plant via its Milpitas Pipeline which terminates in the City.

Although the City purchases are currently limited to surface water largely purchased by SCVWD from the State Water Project and Central Valley Project, SCVWD's overall water supply comes from a variety of sources. Nearly half is from local groundwater aquifers, and more than half is imported from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. Both groundwater and imported water are sold to retailers. SCVWD also manages the groundwater basin to the benefit of agricultural users and other independent users who pump groundwater. Table 3.9-5 below illustrates SCVWD's projected water supply and the Countywide projected water demand for future years 2035 and 2040.

TABLE 3.9-5: SCVWD PROJECTED POTABLE WATER DEMAND VS. SUPPLY FOR MILPITAS (ACRE-FEET)

YEAR	*PROJECTED COUNTYWIDE DEMAND*	*SCVWD'S PROJECTED SUPPLY*
2035	425,800	439,900
2040	435,100	441,900

SOURCE: SCVWD 2015 URBAN WATER MANAGEMENT PLAN.

The City of Milpitas is currently preparing the 2020 Water Master Plan (WMPU), which projects buildout potable water demands to be approximately 13.7 mgd. The 2020 WMPU demand was estimated by starting with the 2019 water demand and adding the water demand estimated for

the future growth areas. The City will have adequate water supply to serve the buildout GPU land uses. Per the 2015 Urban Water Management Plan (UWMP), the City projects combined supplies from the SFPUC and SCVWD to be approximately 14.5 mgd in 2025. By 2040, the buildout time horizon in the Milpitas 2020 Water Master Plan, combined SFPUC and SCVWD supplies are projected to be over 17.5 mgd[4]. Thus, the available water supply of 17.5 mgd exceeds the estimated buildout water demands

Overall, by 2040, the buildout time horizon in the 2020 Water Master Plan Update, the combined SFPUC and SCVWD supplies are projected to be over 17.5 mgd. The available water supply of 17.5 mgd exceeds the estimated buildout water demands (13.1 mgd per the land use-based method and 13.7 mgd per the 2020 WMPU)[5]. Thus, the City will have adequate water supply to serve the buildout of the proposed general plan land uses.

Subsequent development projects under the General Plan, such as residential, commercial, industrial, and roadway projects would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge. However, the majority of developable areas within the Santa Clara Plain Recharge Area are currently developed with urban uses. The majority of open undeveloped lands within the Santa Clara Plain Recharge Area are designated for future hillside residential uses. The amount of new pavement and impervious surfaces, and the extent to which they affect infiltration, depends on the site-specific features and soil types of a given project site. Projects located in urban areas would have less of an impact than projects converting open lands and spaces.

Given that implementation and future buildout of the proposed General Plan would not appreciably add to the volume of imperious surfaces in Milpitas or the Santa Clara Plain Recharge Area, when compared to the overall size of the regional groundwater basin recharge area, and that there are adequate water supplies (including groundwater) to serve the projected buildout demand of the General Plan, this potential impact would be **less than significant**, and no additional mitigation is required.

While mitigation is not required for this less than significant impact, the General Plan includes policies that support water conservation, the use of permeable surfaces and the use of recycled water for non-potable uses and coordination with local water districts when planning for adequate capacity to accommodate future growth. The General Plan and development codes are consistent with the Groundwater Management Plan. Implementation of the following General Plan policies would further ensure that the General Plan would have a **less than significant** impact relative to this topic.

[4] West Yost. *City of Milpitas General Plan Update: Buildout Water Demands and Wastewater Flows*. August 10, 2020.

[5] West Yost. *City of Milpitas General Plan Update: Buildout Water Demands and Wastewater Flows*. August 10, 2020.

GENERAL PLAN MINIMIZATION MEASURES

UTILITIES AND COMMUNITY SERVICES ELEMENT POLICIES

Policy UCS 2-1: Ensure the water system and supply adequately meets the needs of existing and future development and is utilized in a sustainable manner.

Policy UCS 2-3: Pursue additional water supply sources to supplement the City's existing supply as needed to meet projected future demand.

Policy UCS 2-4: Ensure that all new development provides for and funds its fair share of the costs for adequate water distribution, including line extensions, easements, and dedications.

Policy UCS 2-5: Reduce potable water use and increase water conservation.

Policy UCS 2-6: Encourage the use of recycled water for industrial uses and landscape irrigation where feasible, within the parameters of State and County Health Codes and standards and in compliance with regional agency requirements.

Policy UCS 2-7: Maintain existing groundwater wells as a source of emergency water supply and a resource for supplemental supply.

Policy UCS 2-8: Maintain water interties with the San Jose Water Company (SJWC) and Alameda County Water District (ACWD) for emergency water supply.

Policy UCS 3-1: Ensure safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

Policy UCS 3-2: Maintain the existing wastewater system on a regular basis to increase the lifespan of the system and ensure public safety.

Policy UCS 3-3: Ensure that all new development provides for and funds its fair share of the costs for adequate sewer collection and treatment, including line extensions, easements, and dedications.

Policy UCS 4-1: Maintain and improve Milpitas's storm drainage facilities.

Policy UCS 4-2: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

Policy UCS 4-3: Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-4: Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Policy UCS 4-5: Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

Policy UCS 4-6: Applicable projects shall minimize directly connected impervious areas by limiting the overall coverage of paving and roofs, directing runoff from impervious areas to adjacent pervious areas, and selecting permeable pavements and surface treatments.

Policy UCS 4-7: Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

Policy UCS 4-8: Coordinate directly with the Santa Clara Valley Water District to incorporate recreational trails and parkway vegetation design into open stormwater facilities and creek corridors to the greatest extent feasible.

Policy UCS 4-9: Maintain drainage channels in a naturalized condition with riparian corridors and wetland where appropriate, incorporating recreational trails, parkway vegetation, and other amenities and ensuring that vegetation does not reduce channel capacity. Where possible, set back development from these areas sufficiently to maximize habitat values.

Policy UCS 4-10: Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

Policy UCS 4-11: Where possible, avoid new outfalls to natural or earthen channels.

Policy UCS 4-12: Projects accommodating outdoor activities, including work areas, storage areas or other areas that are potential sources of stormwater pollutants, shall incorporate measures to control those pollutant sources to the maximum extent practicable.

Policy UCS 4-13: Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

Policy UCS 4-14: Construction sites shall incorporate measures to control erosion, sedimentation, and the generation of runoff pollutants to the maximum extent practicable. The design, scope and location of grading and related activities shall be designed to cause minimum disturbance to terrain and natural features. (Title II, Chapter 13 of the Municipal Code).

UTILITIES AND COMMUNITY SERVICES ELEMENT ACTIONS

Action USC 2b: Continue to maintain, and periodically review and renew, Water Supply Agreements with the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD). The Water Supply Agreements shall provide for adequate supplies to meet the 20-year General Plan buildout projections for the City.

Action USC 2c: Regularly review and update the City's water conservation measures to be consistent with current best management practices for water conservation, considering measures recommended by the State Department of Water Resources, the California Urban Water Conservation Council, and the Bay Area Water Supply and Conservation Agency.

Action USC 4e: Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

Action USC 4f: Work cooperatively with local, state, and federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP).

Impact 3.9-3: General Plan implementation could alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, impeded flows, or polluted runoff (Less than Significant)

General Plan implementation has the potential to impact the Planning Area's storm drainage system. The potential impacts would be primarily derived from development in what are now underdeveloped and/or underutilized areas, which could affect the existing drainage patterns.

Construction activities are regulated by the NPDES General Construction Storm Water Permit. Compliance with the storm water permit during construction activities requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains BMPs to control the discharge of pollutants, including sediment, into local surface water drainages. Additionally, the City, in accordance with its approved SWMP, must implement Post-Construction Storm Water Management in new development and redevelopment. Further, the SCVURPPP implements pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers.

In addition to complying with the NPDES programs and SCVURPPP stormwater requirements, the General Plan contains policies and actions to reduce impacts associated with stormwater and drainage including policies to maintain sufficient levels of storm drainage service, improvements to flood control facilities, and other best practices in order to protect the community from flood hazards, and minimize the discharge of materials into the storm drain system that are toxic, or which could obstruct flows. Additionally, the General Plan policies encourage that stormwater be directed towards permeable surfaces, incorporate stormwater capture, and promote BMPs and Low Impact Development measures (LID) to treat stormwater.

Individual future projects allowed under the General Plan would create new impervious surfaces. This may result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, potentially generating additional runoff during storm events. In addition, the increase in impervious surfaces, along with the increase in surface water runoff, could increase the non-point source discharge of pollutants. Anticipated runoff contaminants include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. Contributions of these contaminants to stormwater and non-stormwater runoff would degrade the quality of receiving waters. During the dry season, vehicles and other urban activities release contaminants

onto the impervious surfaces, where they can accumulate until the first storm event. During this initial storm event, or first flush, the concentrated pollutants would be transported via runoff to stormwater drainage systems. Contaminated runoff waters could flow into the stormwater drainage systems that discharge into rivers, agricultural ditches, sloughs, and channels, and ultimately could degrade the water quality of any of these water bodies.

The General Plan sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. As previously discussed in the Regulatory Setting section of this chapter, future project applicants would be required to obtain permits from the Army Corps of Engineers and the Department of Fish and Wildlife if any work is performed within a waterway. Each future development project must also include detailed project specific floodplain and drainage studies that assess the drainage characteristics and flood risks so that an appropriate SWMP can be prepared to control storm water runoff, both during and after construction. The SWMP will ultimately include project specific best management measures that are designed to allow for natural recharge and infiltration of stormwater. Construction of storm drainage improvements would occur as part of an overall development or infrastructure project, and is considered in the environmental impacts associated with project construction and implementation as addressed throughout this EIR.

As previously described, the City manages local storm drain facilities and the Santa Clara Valley Water District (SCVWD) is responsible for regional flood control planning within the County. Provision of stormwater detention facilities as needed would reduce runoff rates and peak flows. The City has developed the General Plan to include policies and actions that, when implemented, will reduce flooding from new development, reduce storm water pollution from new development, and protect and enhance natural storm drainage and water quality features, which will in turn reduce water quality impacts. As described previously, existing regulatory requirements including NPDES and Waste Discharge permits from the RWQCB and implementation of BMPs manage quality. Through implementation of the General Plan policies and actions listed below, implementation of the Milpitas Municipal Code requirements identified above, compliance with mandatory Federal and State regulations, and compliance with the existing regulations for the SCVURPPP would ensure that impacts related to increased flooding or water quality impacts associated with increased runoff would be **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

PUBLIC SAFETY ELEMENT POLICIES

Policy SA 2-2: Coordinate with regional and local agencies and private landowners to plan, finance, construct, and maintain local and regional stormwater management and conveyance facilities.

Policy SA 2-3: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for off-site flooding.

UTILITIES AND COMMUNITY SERVICES ELEMENT POLICIES

Policy UCS 1-1: Provide adequate public infrastructure (i.e., street, sewer, water, and storm drain systems) to meet the needs of existing and future development.

Policy UCS 1-2: Require development and long-term planning projects to be consistent with all applicable City infrastructure plans, including the Water Master Plan, Urban Water Management Plan (UWMP), the Sewer Master Plan, the Sewer System Management Plan, the Green Infrastructure Plan, and the Capital Improvement Program.

Policy UCS 1-3: Require all future development projects to analyze their infrastructure and service impacts and either demonstrate that the City's existing infrastructure, public services, and utilities can accommodate the increased demand for services, and that service levels for existing users will not be diminished or impaired, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-1: Maintain and improve Milpitas's storm drainage facilities.

Policy UCS 4-2: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

Policy UCS 4-3: Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-4: Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Policy UCS 4-5: Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

Policy UCS 4-6: Applicable projects shall minimize directly connected impervious areas by limiting the overall coverage of paving and roofs, directing runoff from impervious areas to adjacent pervious areas, and selecting permeable pavements and surface treatments.

Policy UCS 4-7: Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

Policy UCS 4-8: Coordinate directly with the Santa Clara Valley Water District to incorporate recreational trails and parkway vegetation design into open stormwater facilities and creek corridors to the greatest extent feasible.

Policy UCS 4-9: Maintain drainage channels in a naturalized condition with riparian corridors and wetland where appropriate, incorporating recreational trails, parkway vegetation, and other amenities and ensuring that vegetation does not reduce channel capacity. Where possible, set back development from these areas sufficiently to maximize habitat values.

Policy UCS 4-10: Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

Policy UCS 4-11: Where possible, avoid new outfalls to natural or earthen channels.

Policy UCS 4-12: Projects accommodating outdoor activities, including work areas, storage areas or other areas that are potential sources of stormwater pollutants, shall incorporate measures to control those pollutant sources to the maximum extent practicable.

Policy UCS 4-13: Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

Policy UCS 4-14: Construction sites shall incorporate measures to control erosion, sedimentation, and the generation of runoff pollutants to the maximum extent practicable. The design, scope and location of grading and related activities shall be designed to cause minimum disturbance to terrain and natural features. (Title II, Chapter 13 of the Municipal Code).

PUBLIC SAFETY ELEMENT ACTIONS

Action SA 2a: As part of the development review process continue to require new developments to prepare hydraulic and storm drainage studies as necessary to define the net increase in storm water run-off resulting from construction and operation, and require mitigation to reduce identified impacts. Drainage and grading plans shall identify BMP protections and include standards established and recommended by the City that shall be incorporated into development.

Action SA 2e: Periodically Review the City of Milpitas Storm Drain Master Plan, and update as necessary, to ensure that the Plan includes a comprehensive list of capital improvements needed to maintain recommended levels of protection against flooding and stormwater runoff. Continue to seek new revenue streams to fund the necessary improvements and maintenance of the City's storm drainage infrastructure.

Impact 3.9-4: General Plan implementation would not release pollutants due to project inundation by flood hazard, tsunami, or seiche (Less than Significant)

FLOOD

The Planning Area is subject to flooding problems along the natural creeks, drainages, and lakes in the Planning Area. The FEMA FIRM for the Planning Area is shown on Figure 3.9-2. As shown in Figure 3.9-2, the City of Milpitas contains areas within the 1% annual chance flood hazard zone (100-year flood), the 0.2% annual chance flood hazard zone (500-year flood), and areas of undetermined flood hazard. The areas located within the 1% and 0.2% annual chance flood hazard zones are primarily concentrated to the west of Interstate 680, while the areas of undetermined flood hazard are located primarily within the hillside areas in the eastern planning area, east of Interstate 680. Major sources of flooding include Calera, Penitencia, Berryessa, Los Coches, and Tularcitos Creeks. Local drainage systems may also contribute to flood risk, but are not evaluated or mapped by FEMA. In addition, portions of the City may be at risk of inundation from upstream dam failure, with very little warning time. Future flooding trends may also be influenced by changes in the frequency and magnitude of precipitation, sea level rises, and storm surge due to climate change. Severe storm events are projected to increase, and in low-lying areas near the Bay, may experience increased flood risk from the backwater effect from increasing sea levels and coastal storm surges, and could also increase riverine and localized flooding due to extreme precipitation events. Due to local drainage patterns combined with the effects of storm surge in the bay, sea level rise, and more frequent and severe storm events the City of Milpitas may be more prone to more frequent and severe flood occurrences.

Additionally, Flood hazards in the City of Milpitas are described in the Federal Emergency Management Agency's (FEMA's) February 19, 2014 Flood Insurance Study, but are largely based on hydraulic modeling performed in the 1970s and 1980s (FEMA, 2014). A significant portion of the City, particularly west of Interstate 680, is mapped within a Special Flood Hazard Area.

The City is a participant in the National Flood Insurance Program (NFIP). The NFIP provides property owners and renters with federally backed flood insurance, reduces flood damage through a mandatory local floodplain management ordinance, and identifies and maps flood hazards. The NFIP requires the City to maintain a floodplain management ordinance based upon current FEMA Flood Insurance Rate Maps (FIRMs). The City's meets this requirement through the implementation of Floodplain Management Regulations specified in Section XI Chapter 15 of the Milpitas Municipal Code. These maps identify Special Flood Hazard Areas (SFHAs) or areas subject to inundation from a 100-year storm.The General Plan would allow development and improvement projects that would involve some land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. As required by the Clean Water Act, each subsequent development project or improvement project will require an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading and preservation of topsoil. SWPPPs are designed to control storm water quality degradation to the extent practicable using best management practices during and after construction.

As described previously in the Regulatory Setting, the City of Milpitas regulates storm water discharge in accordance with the NPDES permit through Chapter X-16 of the Milpitas Municipal Code. In addition to complying with the NPDES programs and WQMP stormwater requirements, the General Plan contains policies to reduce impacts associated with stormwater and drainage including policies to maintain sufficient levels of storm drainage service, improvements to flood control facilities and channel segments, and other best practices in order to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic. The implementation of the General Plan would result in a **less than significant impact** relative to this topic.

TSUNAMI AND SEICHES

Tsunamis and seiches are standing waves that occur in the ocean or relatively large, enclosed bodies of water that can follow seismic, landslide, and other events from local sources (California, Oregon, Washington coast) or distant sources (Pacific Rim, South American Coast, Alaska/Canadian coast).

The Department of Conservation, California Emergency Management Agency, and California Geological Survey prepare Tsunami Inundation Maps to note tsunami hazards areas throughout California. Figure 3.9-4 illustrates the tsunami inundation areas for emergency planning in the nearby vicinity of the Planning Area. As shown in Figure 3.9-4, no tsunami inundation areas or tsunami inundation lines exist within the Planning Area. The nearest tsunami inundation area and tsunami inundation lines are located approximately 1.75 miles to the northwest of Planning Area generally located where Coyote Creek and the MUD Slough meet along the Santa Clara County and Alameda County boundaries north of the San Francisco Bay National Wildlife Refuge.

Seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors, or other bodies large of water. Any body of water may experience limited oscillation during storm events or following seismic events, however oscillation in small bodies of water is generally limited. In smaller water bodies seiches may have the potential to damage or overtop dams. Generally, in lakes the threat of large-scale damage from seiches comes from downstream flooding that would be caused by large volumes of water overtopping a dam or reservoir.

As shown on Figure 3.9-3, there are multiple dam inundation areas that could impact the Planning Area, including the Anderson Dam and Reservoir, Coyote Dam and Reservoir, and Sandy Wool Lake Dam. These dams do not have a history of dam failure; however, these dams are identified as having the potential to inundate habitable portions of the Planning Area in the unlikely event of dam failure. The Santa Clara Valley Water District's Dam Safety Program recognizes the catastrophic nature of potential dam failure and operates a comprehensive dam safety program to protect the public.

The Dam Safety Program includes four main components:

1. Periodic special engineering studies
2. Surveillance and monitoring program
3. Routine inspections and maintenance activities
4. Maintaining emergency response and preparedness plans

Through the water district's dam safety program, it ensures the continued operation of its 10 major dams within the county. The water district also works closely with state and federal regulators, and downstream emergency response partners. As such, the City is not at significant risk from a dam failure. In addition, limited isolated damage to adjacent and down-slope structures has been observed from seiches occurring in swimming pools and in small shallow lakes and ponds. Man-made lakes within the Planning Area are shallow with limited surface areas, and would not generate devastating seiches. The City of Milpitas is not within a tsunami hazard area and would not be subject to substantial impacts from seiche events. This is a **less than significant** impact and no mitigation is required.

GENERAL PLAN MINIMIZATION MEASURES

UTILITIES AND COMMUNITY SERVICES ELEMENT POLICIES

Policy SA 2-1: Participate in planning efforts undertaken at the regional, state, and federal levels to improve flood management facilities and dam safety throughout Santa Clara County.

Policy SA 2-2: Coordinate with regional and local agencies and private landowners to plan, finance, construct, and maintain local and regional stormwater management and conveyance facilities.

Policy SA 2-3: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for off-site flooding.

Policy SA 2-4: Ensure that construction activities and new development will not result in the creation of adverse, flood-related impacts to existing properties and/or flood control and drainage structures.

Policy SA 2-5: Unless otherwise mitigated, require new structures to be located outside of the 100-year floodplain. All new development within an identified Flood Hazard Area shall be built according to Federal Emergency Management Agency standards and comply with the provisions for flood hazard reduction criteria (Milpitas Municipal Code Section XI-15-5).

Policy SA 2-6: Encourage and accommodate multipurpose flood control projects that incorporate recreation, education, resource conservation, preservation of natural riparian habitat, and the scenic value of drainages, creeks, and detention ponds.

Policy SA 2-7: Encourage flood control measures identified within the Conservation Element such as bioswales, Low Impact Development (LID) strategies, green streets and parking lots and permeable materials that enhance natural drainage features, vegetation, and natural waterways, while still providing for adequate flood control and protection.

Policy SA 2-8: To the greatest extent possible, cooperate with the Santa Clara Valley Water District and Army Corps of Engineers in their development and improvement of flood control facilities which are intended to protect areas from the occurrence of the "1%" or "100-year" flood, or other flood events as required by the state.

Policy SA 2-9: Support state and federal legislation which provides funding for the construction of flood protection improvements in urbanized areas.

Policy SA 2-10: To the greatest extent possible, cooperate with the Santa Clara Valley Water District and Army Corps of Engineers in their efforts to develop and maintain additional flood protection retention facilities in areas where they are needed or where the design capacity of existing retention facilities cannot be restored.

UTILITIES AND COMMUNITY SERVICES ELEMENT POLICIES

Policy UCS 4-1: Maintain and improve Milpitas's storm drainage facilities.

Policy UCS 4-2: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

Policy UCS 4-3: Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-4: Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Policy UCS 4-5: Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

Policy UCS 4-6: Applicable projects shall minimize directly connected impervious areas by limiting the overall coverage of paving and roofs, directing runoff from impervious areas to adjacent pervious areas, and selecting permeable pavements and surface treatments.

Policy UCS 4-7: Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

Policy UCS 4-8: Coordinate directly with the Santa Clara Valley Water District to incorporate recreational trails and parkway vegetation design into open stormwater facilities and creek corridors to the greatest extent feasible.

Policy UCS 4-9: Maintain drainage channels in a naturalized condition with riparian corridors and wetland where appropriate, incorporating recreational trails, parkway vegetation, and other amenities and ensuring that vegetation does not reduce channel capacity. Where possible, set back development from these areas sufficiently to maximize habitat values.

Policy UCS 4-10: Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

Policy UCS 4-11: Where possible, avoid new outfalls to natural or earthen channels.

Policy UCS 4-12: Projects accommodating outdoor activities, including work areas, storage areas or other areas that are potential sources of stormwater pollutants, shall incorporate measures to control those pollutant sources to the maximum extent practicable.

Policy UCS 4-13: Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

Policy UCS 4-14: Construction sites shall incorporate measures to control erosion, sedimentation, and the generation of runoff pollutants to the maximum extent practicable. The design, scope and location of grading and related activities shall be designed to cause minimum disturbance to terrain and natural features. (Title II, Chapter 13 of the Municipal Code).

PUBLIC SAFETY ELEMENT ACTIONS

Action SA 2a: As part of the development review process continue to require new developments to prepare hydraulic and storm drainage studies as necessary to define the net increase in storm water run-off resulting from construction and operation, and require mitigation to reduce identified impacts. Drainage and grading plans shall identify BMP protections and include standards established and recommended by the City that shall be incorporated into development.

Action SA 2b: Continue to participate in the National Flood Insurance Program (NFIP), and NFIP's Community Rating System (CRS).

Action SA 2c: Continue to review projects in flood hazard areas to ensure compliance with Milpitas Municipal Code Title XI, Chapter 15 – (Floodplain Management Regulations).

Action SA 2d: Periodically Review Milpitas Municipal Code Title XI, Chapter 15 – (Floodplain Management Regulations), and revise as necessary to ensure that development standards are consistent with the requirements of state and Federal law.

Action SA 2e: Periodically Review the City of Milpitas Storm Drain Master Plan, and update as necessary, to ensure that the Plan includes a comprehensive list of capital improvements needed to maintain recommended levels of protection against flooding and stormwater runoff. Continue to seek new revenue streams to fund the necessary improvements and maintenance of the City's storm drainage infrastructure.

Action SA 2f: Periodically review the condition of City-owned bridges, culverts, canals and other flood control and stormwater conveyance infrastructure, and when feasible include necessary improvements within the CIP to increase safety and the adequate conveyance of stormwater.

Encourage external agencies to undertake regular review of their non-City-owned flood control and storm water infrastructure located within the Milpitas Planning Area, as well as those facilities located both upstream and downstream.

Action SA 2g: Require developers to adequately fund the costs of drainage facilities needed for surface runoff generated as a result of new development.

Action SA 2h: Monitor information from regional, state, and federal agencies on water level rises in San Francisco Bay on an on-going basis. Use this information to determine if additional adaptive management actions are needed and implement those actions to address flooding hazards from increasing sea levels for existing or new development and infrastructure.

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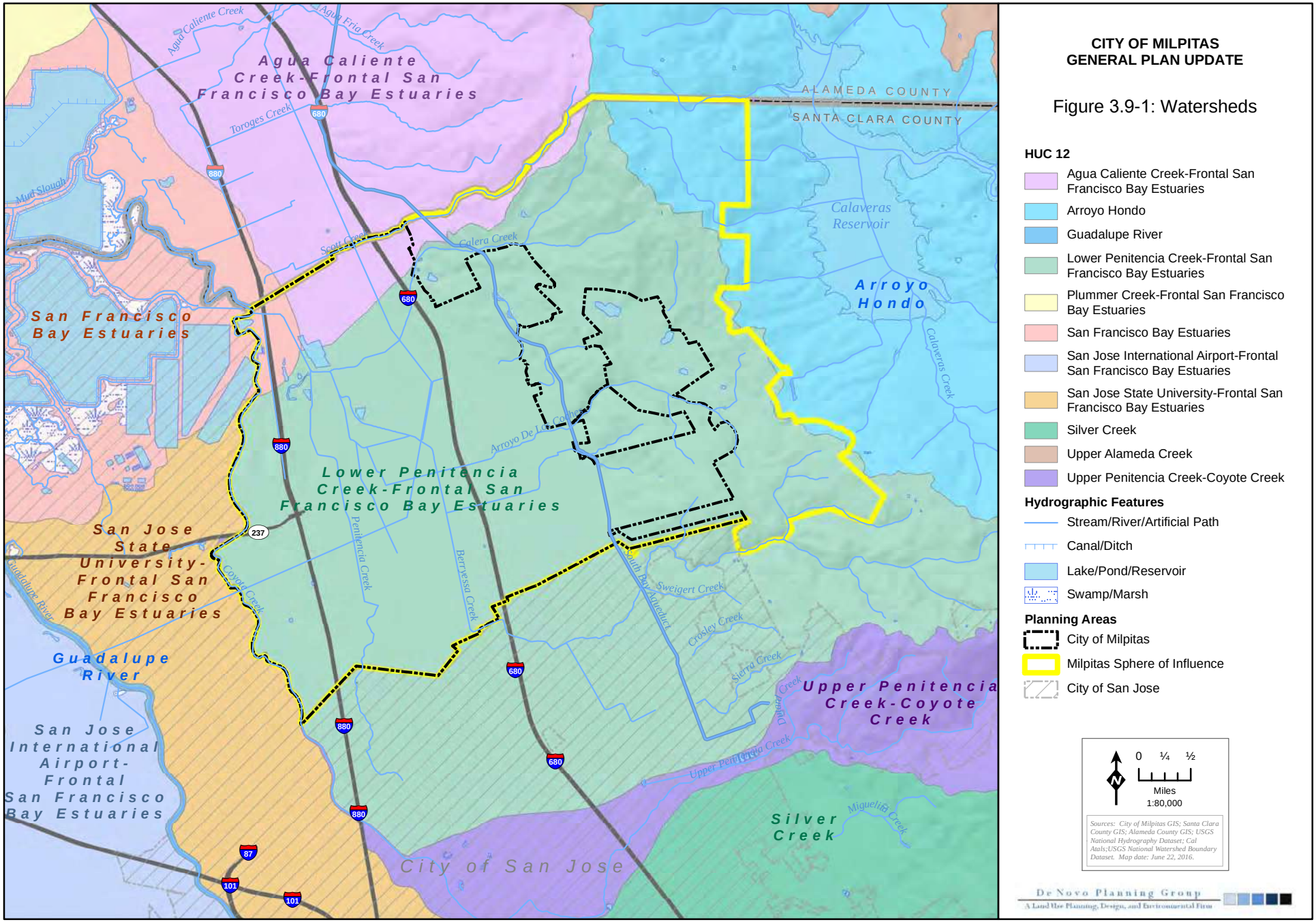

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.9-1: Watersheds

HUC 12

- Agua Caliente Creek-Frontal San Francisco Bay Estuaries
- Arroyo Hondo
- Guadalupe River
- Lower Penitencia Creek-Frontal San Francisco Bay Estuaries
- Plummer Creek-Frontal San Francisco Bay Estuaries
- San Francisco Bay Estuaries
- San Jose International Airport-Frontal San Francisco Bay Estuaries
- San Jose State University-Frontal San Francisco Bay Estuaries
- Silver Creek
- Upper Alameda Creek
- Upper Penitencia Creek-Coyote Creek

Hydrographic Features

- Stream/River/Artificial Path
- Canal/Ditch
- Lake/Pond/Reservoir
- Swamp/Marsh

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 ¼ ½
Miles
1:80,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atals;USGS National Watershed Boundary Dataset. Map date: June 22, 2016.

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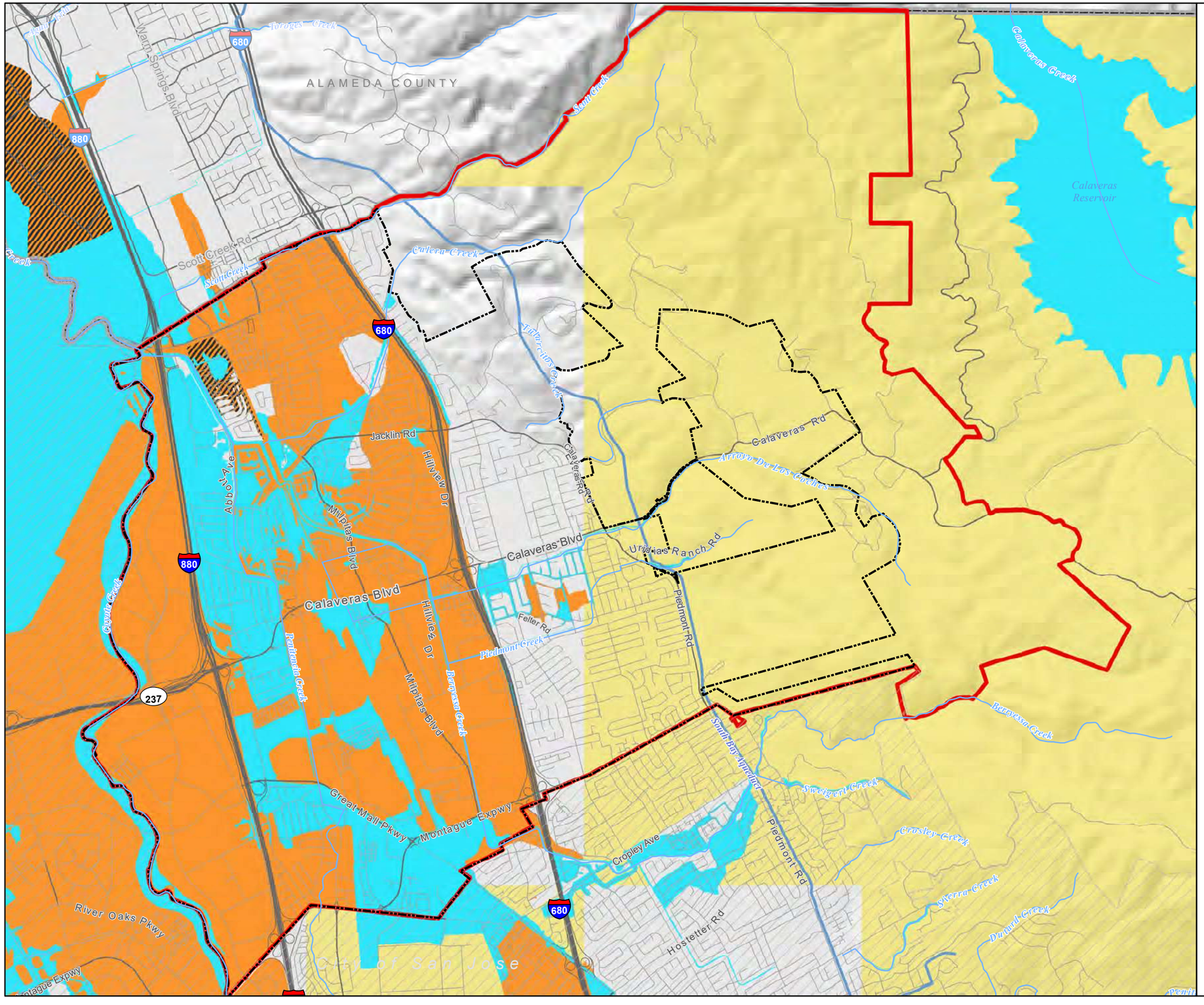
CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.9-2.
FEMA Flood Hazard Zones



FEMA Designation

- 1% Annual Chance Flood Hazard (100-yr Flood)
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard (500-yr Flood)
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 ¼ ½
Miles
1:49,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Caltrans; FEMA's National Flood Hazard Layer (Official) accessed June 17, 2016. Map date: June 17, 2016.

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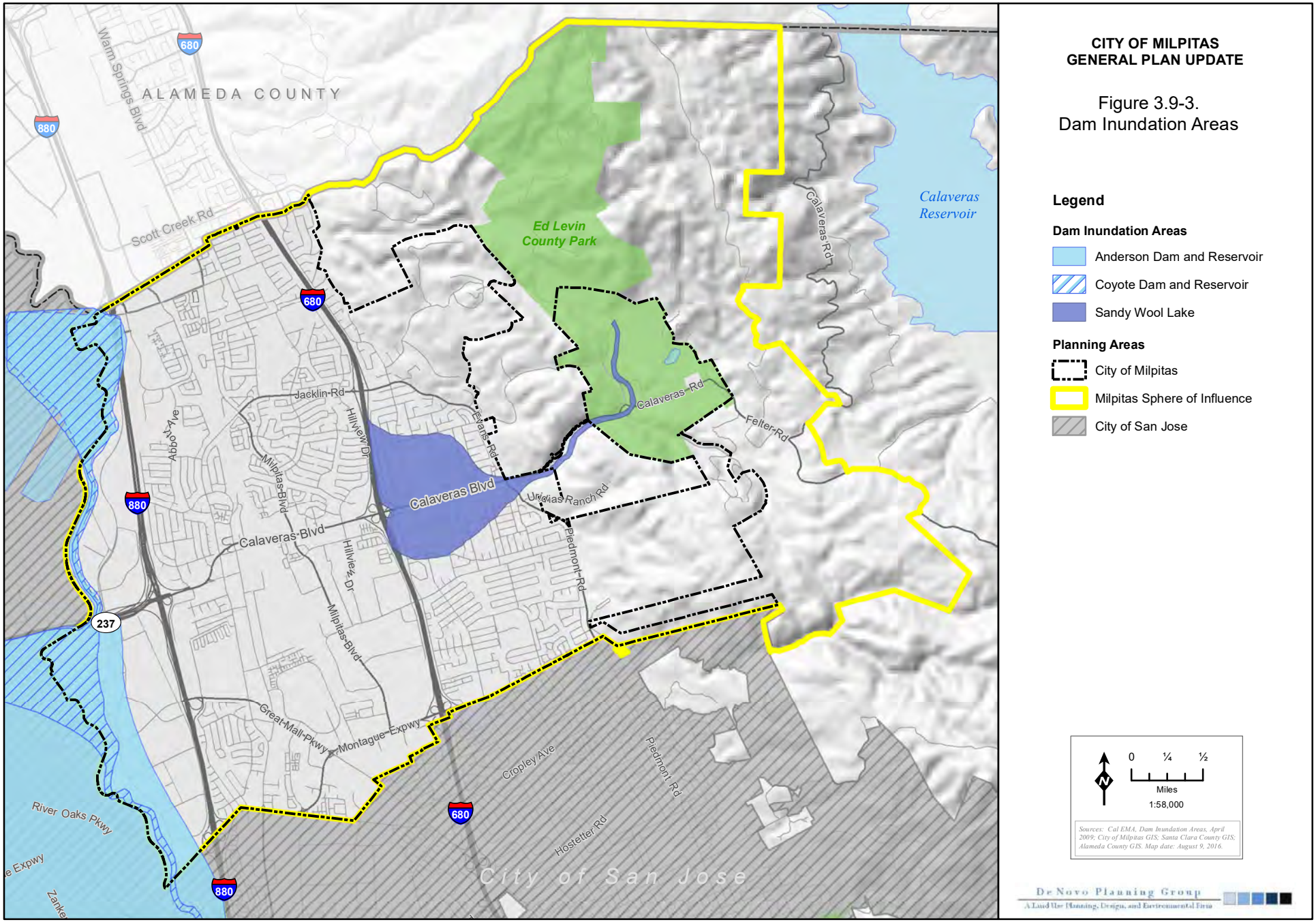

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.9-3.
Dam Inundation Areas

Legend

Dam Inundation Areas

- Anderson Dam and Reservoir
- Coyote Dam and Reservoir
- Sandy Wool Lake

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 ¼ ½
Miles
1:58,000

Sources: Cal EMA, Dam Inundation Areas, April 2009; City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS. Map date: August 9, 2016.

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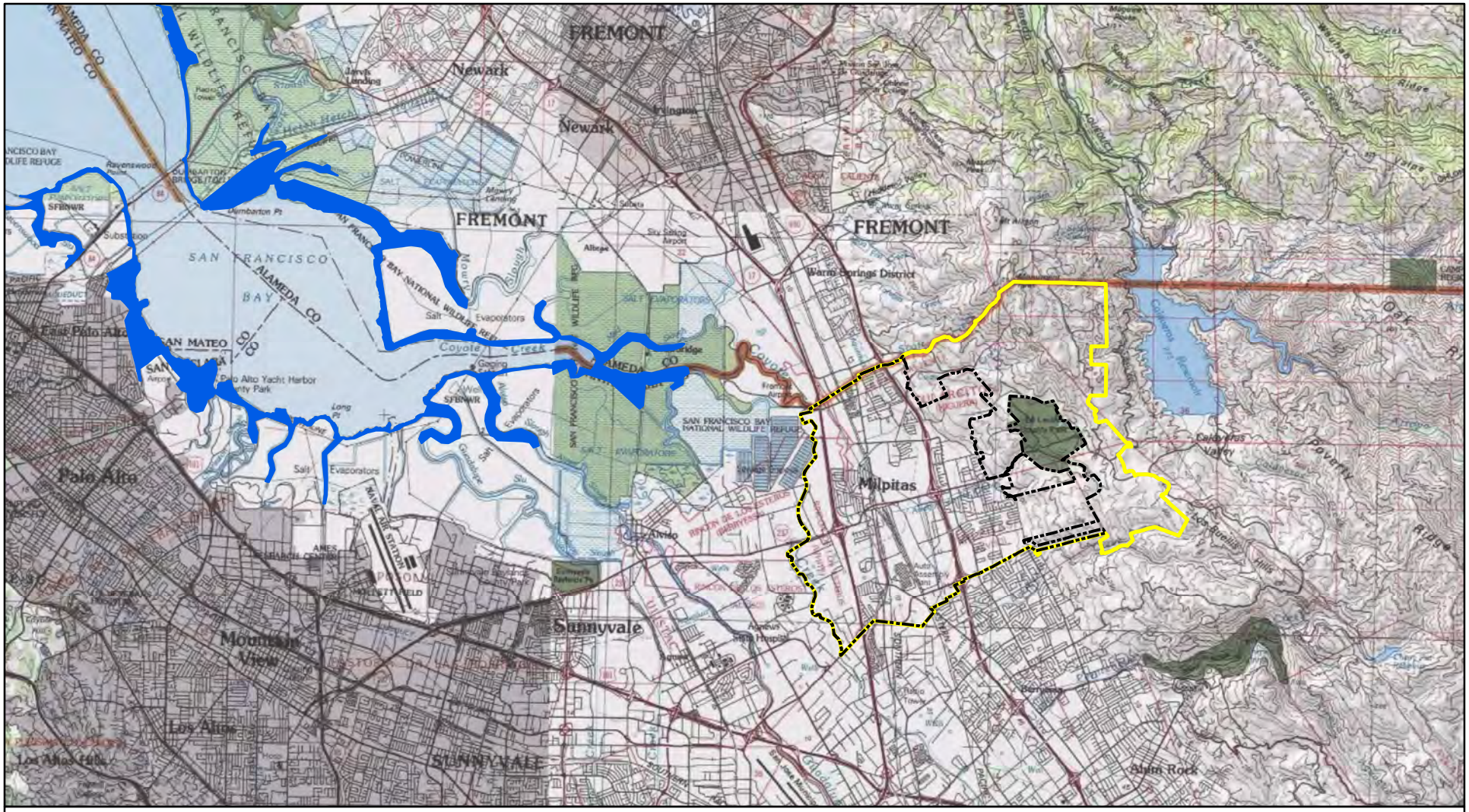

Legend

- Tsunami Inundation Areas for Emergency Planning
- City of Milpitas
- Milpitas Sphere of Influence

0 ½ 1
Miles
1:150,000

Sources: Association of Bay Area Governments, Tsunami Basics; City of Milpitas; ArcGIS Online USGS Topographic Map Service. Map date: March 2, 2017.

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.9-4. Tsunami Hazard Areas

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This section identifies the existing land use conditions, discusses population and housing trends and projections, and analyzes the Project's consistency with relevant planning documents and policies adopted for the purpose of avoiding or mitigating an environmental effect. General Plan policies associated with other specific environmental topics are discussed in the relevant sections of this EIR.

No comments on this environmental topic were received during the NOP comment period.

3.10.1 ENVIRONMENTAL SETTING

EXISTING CONDITIONS

The City Limits includes the area within the City's corporate boundary, over which the City exercises land use authority and provides public services. A City's Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). An SOI may include both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services. For the purposes of the Milpitas General Plan Update, the Planning Area is defined as the area within the City's SOI/City Boundary that is included in the analysis and planning for the approximate 20-year horizon of the City's General Plan Update.

Land Use Patterns

When discussing land use, it is important to distinguish between planned land uses and existing land uses. The General Plan land use designations identify the long-term planned use of land but do not present a complete picture of existing land uses. The Santa Clara County Assessor's office maintains a database of existing land uses on individual parcels, including the number of dwelling units and related improvements such as non-residential building square footage. This information is used as the basis for property tax assessments. Figure 3.10-1 and Table 3.10-1 show existing assessed land uses within the Milpitas City Limits.

TABLE 3.10-1: EXISTING ASSESSED USES MILPITAS (CITY LIMITS)

Uses (City Limits)	*Parcel Count*	*Residential Units*	*Non-Residential Square Feet*	*Acres*	*% of Total Acres*
Single Family Residential	**12,417**	**12,420**	**0**	**1,918.95**	**26.47%**
1-Single Family	12,417	12,420	0	1,918.95	26.47%
Multi-Family Residential	**4,976**	**9,777**	**0**	**367.69**	**5.07%**
2-Two Family	151	302	0	30.05	0.41%
3-Three and Four Family	150	585	0	33.68	0.46%
4-Five or More Family	64	4,283	0	192.82	2.66%
6-Condominium, Townhouse	4,611	4,607	0	111.14	1.53%
Agricultural	**19**	**0**	**32,557**	**569.16**	**7.85%**
91-Agriculture: Orchard	4	0	0	10.18	0.14%
92-Agriculture: Intensive Non-Orch Field Crop, Ti*	2	0	0	0.54	0.01%
93-Agriculture: Pasture, Grazing, Rangeland	12	0	32,557	556.47	7.68%
97-Flower Growers	1	0	0	1.96	0.03%
Commercial	**213**	**0**	**5,594,136**	**441.27**	**6.09%**
50-Regional	4	0	1,253,827	106.51	1.47%
51-Community	11	0	196,498	13.69	0.19%
52-Neighborhood	22	0	1,010,050	96.59	1.33%
58-Retail Uses (not Regional, Comm, or Neigh)	159	0	3,101,370	213.81	2.95%
61-Service Stations	17	0	32,391	10.67	0.15%
Industrial Manufacturing	**93**	**0**	**860,552**	**69.79**	**0.96%**
20-Food and Kindred Products, Wineries	1	0	50,000	4.46	0.06%
22-General Manuracturing (Mixed and Misc. Uses)	7	0	246,583	23.17	0.32%
26-Paper and Allied Products	1	0	217,500	14.59	0.20%
28-Chemicals and Allied Products: Pharmaceuticals	2	0	20,232	3.78	0.05%
32-Stone Clay and Glass Products	2	0	5,784	12.22	0.17%
33-Primary Metal Industries	1	0	17,820	1.71	0.02%

Uses (City Limits)	*Parcel Count*	*Residential Units*	*Non-Residential Square Feet*	*Acres*	*% of Total Acres*
34-Fabricated Metal Products	3	0	89,267	5.15	0.07%
40-Industrial Condominium	76	0	213,366	4.72	0.07%
Industrial Nonmanufacturing	**312**	**0**	**19,158,620**	**1,213.91**	**16.75%**
10-Lumber and Other Building Materials Dealers	1	0	90,000	3.16	0.04%
11-Public Warehouse (incl. Mini-Storage Facilities	26	0	2,342,848	167.78	2.31%
12-Wholesaling with Stock (with Warehousing)	2	0	178,795	7.97	0.11%
14-Research and Development Branches of MFG Firms	63	0	8,011,683	491.68	6.78%
15-Metal and Mineral Wholesalers, inc. bulk station	2	0	6,425	2.72	0.04%
16-General Industrial Non-MFG or Combination	210	0	8,226,923	518.11	7.15%
17-Yards for Equipment and Supplies of Contractors	3	0	9,682	4.11	0.06%
18-Vacant Industrial Non-MFG Buildings and Uses	1	0	79,200	5.19	0.07%
19-Misc. Industrial Non-MFG and Heavy Commercial	4	0	213,064	13.19	0.18%
Institutional	**65**	**0**	**418,185**	**345.91**	**4.77%**
62-Childcare Facilities, Preschools, Adult Daycare	7	0	90,845	9.28	0.13%
71-Public Schools and Playfields	13	0	0	187.04	2.58%
72-Other Schools	3	0	33,875	12.19	0.17%
73-Major Hospitals, Other Hospital-Owned Bldgs	2	0	62,532	2.11	0.03%
74-Public Buildings	13	0	60,000	78.42	1.08%
75-Convalescent Hospitals, Skilled Nursing Facil.	1	0	6,552	0.53	0.01%
76-Churches	25	0	164,380	54.68	0.75%
89-Cemeteries	1	0	1	1.65	0.02%
Office	**178**	**0**	**1,251,879**	**113.37**	**1.56%**
59-Offices, High Rise Ofc Bldgs, Banks & Clinics	178	0	1,251,879	113.37	1.56%
Open Spaces	**104**	**0**	**48,000**	**618.62**	**8.53%**
86-Other Public Open Space Uses	15	0	0	332.41	4.59%
87-Commercial Open Space Uses, Public Parking	4	0	48,000	2.24	0.03%

Uses (City Limits)	*Parcel Count*	*Residential Units*	*Non-Residential Square Feet*	*Acres*	*% of Total Acres*
95-Reservoir, Water Supply, Flood Control Lands	84	0	0	279.63	3.86%
98-Marsh, Swamp, and Tidal Flat Lands	1	0	0	4.34	0.06%
Parks and Recreational Facilities	**49**	**0**	**219,648**	**438.65**	**6.05%**
64-Recreational Facilities	12	0	101,251	323.64	4.46%
65-Social Clubs, Fraternal Orders, Community Ctrs	3	0	117,885	9.30	0.13%
81-Neighborhood Parks	31	0	0	93.32	1.29%
82-Playgrounds, Not Associated with Schools	1	0	512	0.68	0.01%
83-Neighborhood Pool Clubs	1	0	0	0.48	0.01%
84-Playfields, Not Associated with Schools	1	0	0	11.22	0.15%
Transportation/Communication/Utilities	**71**	**0**	**9,982**	**158.91**	**2.19%**
41-Streets - Limited Access	3	0	0	1.56	0.02%
42-Streets - Local	1	0	0	0.27	0.00%
43-Railroad Transportation	23	0	0	45.88	0.63%
44-Utilities and Communications	43	0	0	106.10	1.46%
46-Bus and Truck Transportation	1	0	9,982	5.10	0.07%
Vacant Urban Lands	**419**	**0**	**338,754**	**499.94**	**6.90%**
69-Vacant Urban	419	0	338,754	499.94	6.90%
No APN (Non-Taxable)	**511**	**0**	**0**	**492.80**	**6.80%**
No APN	511	0	0	492.80	6.80%
Grand Total	**19,427**	**22,197**	**27,932,313**	**7,248.97**	**100.00%**

SOURCE: SANTA CLARA COUNTY ASSESSOR'S OFFICE, 2016; DE NOVO PLANNING GROUP, 2016.

Existing land uses refers to the existing built environment, which may be different from the land use or zoning designations applied to land in the city for planning purposes. Existing land uses within the city are based on data provided by the County Assessor and are described below.

RESIDENTIAL

Residential uses in Milpitas include single-family houses and multi-family developments. Single family residential is the dominant land use type in the city, accounting for approximately 26.5% of the land area within the city limits. Single family residential land uses are located throughout the city. As shown on Figure 3.10-1, much of the single family uses are located north of Calaveras Boulevard, and south of Calaveras in the south east portion of the city. There are approximately 12,420 single family residential units in the city, located on 12,417 parcels which total 1,918.95 acres.

Multifamily residential refers to parcels that contain more than one housing unit, and attached structures including duplexes, triplexes, fourplexes, condominiums, townhomes, and apartment buildings. The predominate type of multifamily development is townhomes and condominiums, which account for 4,607 units. An additional 4,283 multifamily units are located within five or more unit structures. Multifamily uses are generally located near services, including retail and commercial uses, and are distributed throughout the city, as shown on Figure 3.10-1.

INDUSTRIAL NON –MANUFACTURING

The majority of non-residential development acreage in the city is Industrial non-manufacturing, which includes approximately 19 million square feet (s.f.) of building area on 1,213 acres. Industrial Non-Manufacturing uses include Lumber and Other Building Materials Dealers (90,000 s.f.), Public Warehousing (2,342,848 s.f.), Wholesaling with Stock (178,795 s.f.) Research & Development Branches of Manufacturing Firms (8,011,683 s.f.), General Industrial Nonmanufacturing or Combination Manufacturing and Non-Manufacturing (8,226,923 s.f.), Yards - Equipment/Supplies (9,682 s.f.), and Miscellaneous Industrial Nonmanufacturing & Heavy Commercial (213,064 s.f.). Vacant Industrial Non-MFG Buildings and Uses account for 5.19 acres, and 79,200 square feet. Figure 3.10-1 shows Industrial Non-Manufacturing uses throughout the city.

INDUSTRIAL MANUFACTURING

Industrial Manufacturing uses total approximately 860,552 s.f. of development on 69.79 acres. Industrial Manufacturing uses include Food and Kindred Products and Wineries (50,000 s.f.), General Manufacturing (246,583 s.f.), Paper and Allied Products (217,500s.f.), Chemicals and Allied Products including Pharmaceuticals (20,232 s.f.), Fabricated Metal Products (89,267 s.f.), and Industrial Condominium (213,366 s.f.). Figure 3.10-1 shows Industrial Manufacturing uses throughout the city.

COMMERCIAL

Commercial uses within the city include approximately 5.6 million square feet (s.f.) of building area on 441.27 acres. Commercial uses, as identified by the County Assessor, are varied. The predominate type of commercial land use, based on s.f. of development, is retail uses other than regional commercial and neighborhood shopping (3,101,370 s.f.), Regional Commercial (1,253,827 s.f.), and neighborhood shopping centers (1,010,050 s.f.). Other commercial uses in Milpitas include Community commercial areas that account for 13.69 acres of land and 196,498 s.f, and Service Stations which account for 32,391 s.f. on 10.67 acres. As shown on Figure 3.10-1, many of the city's commercial uses are located in and around Calaveras Boulevard, and Great Mall Drive.

OFFICE

Offices uses include High-Rise Office, Banks, and Clinical Offices. Office development includes 178 parcels on approximately 113.37 acres of land and includes approximately 1,251,879 s.f of office uses. Office uses are located throughout the city as shown on Figure 3.10-1.

INSTITUTIONAL

Institutional uses include Childcare, Preschool, and Adult Daycare Centers, Residential Care Facilities, Mortuaries, Public and Private Schools and Playfields, Public Buildings, Convalescent Hospitals, Skilled Nursing Facilities, and Churches. There are 65 parcels with institutional uses that include 418,185 s.f. of development on 345.91 acres. Churches represent the most development in the institutional category with 164,380 s.f. on 54.68 acres. The category with development acreage is Public Schools and Playfields, which include 187.04 acres. Institutional uses located throughout the city as shown on Figure 3.10-1.

AGRICULTURE LAND

The agriculture and land category includes urban agricultural uses, grazing, and orchard crops. Nineteen parcels have been designated Agricultural by the county assessor, totaling 569.16 acres of land located in the eastern portion of the city. Agriculture: Pasture, Grazing, Rangeland is the largest category and accounts for 556.47 acres. Figure 3.10-1 shows agricultural uses throughout the city.

PARKS AND RECREATIONAL FACILITIES

The Parks and Recreational Facilities category includes Social Clubs, Community Centers, Neighborhood Parks, Neighborhood Pool Clubs, and Playfields (not associated with schools). Parks and Recreational Facilities includes 438.65 acres on 49 parcels, and includes approximately 219,648 square feet of recreational facilities. Figure 3.10-1 shows Park and recreational facilities uses throughout the city.

TRANSPORTATION COMMUNICATION AND UTILITIES

The Transportation Communication and Utilities uses include limited and local access streets, railroad transportation, utilities & communication, and bus and truck transportation. Transportation Communication and Utilities uses includes 158.91 acres within the city totaling 71 parcels. Figure 3.10-1 shows transportation communication and utilities uses throughout the city.

OPEN SPACES

Open space uses within this category include: Public Open Space Uses Other than parks, Commercial Open Space Uses, Public Parking, Reservoir, Water Supply, Flood Control Lands, and Marsh, Swamp, and Tidal Flat Lands. Open spaces account for 104 parcels, and 618.62 acres of land within the city. Reservoir, Water Supply, Flood Control Lands account for 279.63 acres of open space uses, while Other Public Open Space Uses total 332.41 acres. Figure 3.10-1 shows open space uses throughout the city.

VACANT URBAN LANDS

Vacant Urban Land is generally unused land. Vacant Urban Lands within the city include 499.94 acres of land on 419 parcels, and account for approximately 7% of the total assessed area within the city

limits. Lands in this category are typical void of structures however, according to County Assessor data includes approximately 338,754 square feet of non-residential uses. Figure 3.10-1 shows vacant uses throughout the city.

EXISTING ASSESSED USES WITHIN THE SOI

Existing uses that dominate the Milpitas SOI include Agricultural uses (predominantly grazing), which accounts for 64.88 percent of the SOI land area, and Transportation Communication and Utilities which represent 18.41 percent of the SOI. Figure 3.10-1 shows existing uses within the Milpitas SOI.

Population and Households

Table 3.10-2 summarizes U.S. Census and Department of Finance population and household data for Milpitas and Santa Clara County from 1970 through 2019.

Milpitas experienced moderate population growth between 2000 and 2010. The City's population increased from approximately 63,000 in 2000 to approximately 67,000 in 2010, a six-percent increase. Population growth rates were comparable in Santa Clara County overall (approximately six -percent) between 2000 and 2010.

As presented in Table 3.10-2 below, in the decades starting from 1970 through 2000, Milpitas's population grew significantly more than between 2000 and 2010. However recent growth from 2010 to 2019 shows increased growth rates as compared to the decade from 2000 through 2010. As of January 2019, Milpitas's population was estimated by the State Department of Finance to be 76,211, an increase of 14% from the city's 2010 population of 66,790.

TABLE 3.10-2 POPULATION AND HOUSEHOLD GROWTH

	1970	*1980*	*1990*	*2000*	*2010*	*2019*	*1970-1990 CHANGE (%)*	*1990-2010 CHANGE (%)*	*AVERAGE ANNUAL CHANGE 1970-2019 (%)*
MILPITAS									
Population	27,149	37,784	50,686	62,698	66,790	76,211	86.7%	31.8%	3.7%
Households	6,620	11,336	14,237	17,132	19,184	22,027	115.1%	34.7%	3.9%
Persons per household	4.01	3.27	3.33	3.47	3.34	3.45	(17.0)%	0.3%	(0.3)%
SANTA CLARA COUNTY									
Population	1,064,714	1,295,071	1,497,577	1,682,585	1,781,642	1,954,833	40.7%	19.0%	1.7%
Households	322,870	458,914	522,040	565,863	604,204	671,439	61.7%	15.7%	2.2%
Persons per household	3.23	2.76	2.81	2.92	2.90	2.99	(13.0)%	3.2%	(0.2)%

SOURCE: 1970, 1980, 1990, 2000, 2010 CENSUS, DOF POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, JANUARY 2019.

As shown in Table 3.10-2, households increased at a much higher rate (115 percent) compared to Milpitas's population (86 percent) from 1970 through 1990. From 1990 to 2010 both households and population growth slowed and household increases outpaced population increases at 34 and 31 percent respectively.

Over the years, the average household size has fluctuated slightly with a high of 4.01 in 1970, and a low of 3.27 in 1980. During all decades, household size has remained higher than countywide averages. In recent years, household size has remained at similar levels with an average of 3.47 persons per household in 2000, 3.34 persons per household in 2010, and an estimated 3.45 persons per household in 2019.

Housing Units

As of January 2019, the State Department of Finance estimates identified 21,450 housing units in Milpitas. Between 2000 and 2010, the City's housing stock increased approximately 14-percent to 19,806 housing units, with an additional 8.3 percent increase from 2010 to 2016.

Table 3.10-3 compares Milpitas's housing growth from 2000 thorough 2019 with the County as a whole. As shown in Table 3.10-3, Housing growth levels in Milpitas between 2000 and 2010 were higher than countywide increased between the same time period at 14 percent and 9.1 percent respectively. Between 2010 and 2019 Milpitas's housing unit growth continues to outpace Santa Clara County at 11.2 percent and 6.3 percent respectively.

TABLE 3.10-3 HOUSING UNITS

	2000	*2010*	*2019 ESTIMATED BY DOF*	*2000-2010 CHANGE (%)*	*2010-2019 CHANGE (%)*	*AVERAGE ANNUAL CHANGE*
Milpitas	17,364	19,806	22,027	14.1%	11.2%	1.2%
Santa Clara County	579,329	631,920	671,439	9.1%	6.3%	0.7%

SOURCE: CENSUS 2000, CENSUS 2010, DOF E-5 POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, JANUARY 2019.

Table 3.10-4 show housing units by type within Milpitas estimated by the DOF for 2019. As shown in Table 3.10-4 the City of Milpitas has a diverse range of housing, however, the majority of the housing units in the city are single family detached, which account for 55% of housing units. The remaining housing types include single family attached (17%), duplexes through fourplexes (7%), multi-family apartments with five or more units (20%), and mobile homes (2%).

TABLE 3.10-4 HOUSING UNITS BY TYPE

	TOTAL	*SINGLE DETACHED*	*SINGLE ATTACHED*	*TWO TO FOUR*	*FIVE PLUS*	*MOBILE HOMES*	*OCCUPIED*
Milpitas	22,027	12,047	3,760	1,468	4,328	424	21,349
Milpitas %		55%	17%	7%	20%	2%	97%

Santa Clara County	671,439	350,878	65,159	49,226	187,252	18,924	642,917
County %		58%	7%	9%	21%	5%	94%

SOURCE: DOF E-5 POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, JANUARY 2019.

Population and Household Trends

As shown in Table 3,10-5, Milpitas has experienced substantial population and household growth since 2000. The city had a population of 76,211 residents and 22,027 households in 2019. These figures represent a 21.6 percent increase in population and a 28.6 percent increase in households since 2000, significantly higher than the rates of growth in Santa Clara County (16.2 percent increase in population; 18.7 percent increase in households). Household growth outpaced population growth in Milpitas during this time, leading to a decline in the average household size from 3.47 in 2000 to 3.45 in 2019. In contrast, average household sizes in the county and region increased during the same period (2.99 persons in Santa Clara County) in 2019.

TABLE 3.10-5: POPULATION AND HOUSEHOLD GROWTH, 2000-2019

	2000	*2019*	*CHANGE*	
			NUMBER	*PERCENT*
MILPITAS				
Population	62,698	76,211	13,513	21.6%
Households	17,132	22,027	4,895	28.6%
Average Household Size	3.47	3.45	--	--
Santa Clara County				
Population	1,682,585	1,954,833	272,248	16.2%
Households	565,863	671,439	105,576	18.7%
Average Household Size	2.92	2.99	--	--

SOURCES: DOF E-5 POPULATION AND HOUSING ESTIMATES FOR CITIES, COUNTIES, AND THE STATE, JANUARY 2019

3.10.2 REGULATORY SETTING

STATE

California General Plan Law

Government Code Section 65300 requires that each county and city 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 General Plan will include a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map. It is a comprehensive long-term plan for the physical development of the county or city and is considered a "blueprint" for development. The General Plan must contain seven state-mandated elements: Land Use, Open Space, Conservation, Housing, Circulation, Noise, and Safety. In addition to the state-mandated elements the State provides additional requirements for topical areas for the general plan to address, for example: climate resiliency and adaptation, and environmental justice. The General Plan may also contain any other

elements that a county or city wishes to include. The land use element designates the general location and intensity of designated land uses to accommodate housing, business, industry, open space, education, public buildings and grounds, recreation areas, and other land uses.

The 2017 General Plan Guidelines, established by the Governor's Office of Planning and Research (OPR) to assist local agencies in the preparation of their general plans, further describe the mandatory land use element as a guide to planners, the general public, and decision makers prescribing the ultimate pattern of development for the county or city.

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as the Regional Housing Needs Allocation (RHNA) and is based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Association of Bay Area Governments (ABAG) is the lead agency for developing the RHNP for the nine-county area that includes Santa Clara County and the City of Milpitas. ABAG, working with the Housing Methodology Committee (HMC), distributes the share of the region's housing need to each city, town and county in the region. Each local government must then update the Housing Element of its general plan to show the locations where housing can be built and the policies and strategies necessary to meet the community's housing needs. ABAG conducts the RHNA process every eight years as required by state law. Milpitas's fair share of the adopted RHNA for 2007-2014 and the RHNA for 2015-2023 is summarized in Table 3.10-6.The City is not required to ensure that adequate development to accommodate the RHNA occurs; however, the City must facilitate housing production by ensuring that land is available and that unnecessary development constraints have been removed. The City's Housing Element, adopted in 2015, provides for the accommodation of the 2015-2023 RHNA that has been assigned to the City of Milpitas. As part of the region's planning efforts, ABAG and the Metropolitan Transportation Commission (MTC) The RHNA must allocate housing units within the region consistent with the development pattern included in the Sustainable Communities Strategy.

TABLE 3.10-6: REGIONAL HOUSING NEEDS ALLOCATION

VERY LOW INCOME	*LOW INCOME*	*MODERATE INCOME*	*ABOVE MODERATE INCOME*	*TOTAL*
2015-2023				
1,004	570	565	1,151	3,290
2007-2014				
689	421	441	936	2,487

SOURCE: ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG), REGIONAL HOUSING NEEDS 2007-2014 ALLOCATION, ABAG, 2013; BAE, 2013, CITY OF MILPITAS, 2014; BAE, 2013.

Regional Transportation Plan/Sustainable Communities Strategy

MTC and the Association of Bay Area Governments (ABAG) released the Final Plan Bay Area 2040 document in 2017. After two years of public discussion and technical work, the Final Plan Bay Area 2040 is an updated long-range Regional Transportation Plan and Sustainable Communities Strategy for the nine-county San Francisco Bay Area. The plan charts a course for transportation investment

and land-use priorities. MTC is currently working towards adoption of Plan Bay Area 2050, which is estimated to be completed by summer 2021.

Subdivision Code

A subdivision is any division of land for the purpose of sale, lease or finance. The State of California Subdivision Map Act (Government Code § 66410) regulates subdivisions throughout the state. The goals of the Subdivision Map Act are as follows:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of a subdivision with proper consideration of its relationship to adjoining areas.
- To ensure that areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community.
- To protect the public and individual transferees from fraud and exploitation.

The Map Act allows cities flexibility in the processing of subdivisions. Milpitas controls this process through the subdivision regulations in the Municipal Code Title 11, Chapter 1 (referred to as the Milpitas Subdivisions Code). These regulations ensure that minimum requirements are adopted for the protection of the public health, safety and welfare; and that the subdivision includes adequate community improvements, municipal services, and other public facilities.

LOCAL

Local Agency Formation Commission of Santa Clara County

In 1963, the State Legislature created a local agency formation commission (LAFCO) for each county, with the authority to regulate local agency boundary changes. Subsequently, the State has expanded the authority of a LAFCO. The goals of a LAFCO include preserving agricultural and open space land resources and providing for efficient delivery of services. The Santa Clara County LAFCO has authority over land use decisions in the County affecting local agency boundaries. Its authority extends to the incorporated cities, including annexation of County lands into a city, and special districts within the County. LAFCO has the authority to review and approve or disapprove the following:

- Annexations to or detachments from cities or districts.
- Formation or dissolution of districts.
- Incorporation or disincorporation of cities.
- Consolidation or reorganization of cities or districts.
- Extensions of service beyond an agency's jurisdictional boundaries.
- Development of, and amendments to, Spheres of Influence (SOI). The SOI is the probable physical boundary and service area of each local government agency. This may extend beyond the current service area of the agency.

- Provision of new or different services by districts.

In addition, LAFCO conducts Municipal Service Reviews (MSRs) for services within its jurisdiction. An MSR typically includes a review of existing municipal services provided by a local agency and its infrastructure needs and deficiencies. It also evaluates financing constraints and opportunities, management efficiencies, opportunities for rate restructuring and shared facilities, local accountability and governance, and other issues.

Legislation, including Assembly Bill 1555 and Senate Bill 244, has been enacted to encourage the identification and annexation of islands, which are unincorporated areas substantially surrounded by a city or cities. As part of LAFCO's charges of encouraging logical and orderly agency boundaries to promote the efficient extension of municipal services, Santa Clara County LAFCO has identified 50 islands that result in service confusion and inefficiencies as candidates for annexation. The following island is located within the Milpitas SOI.

- *Island MP01*– An approximately 1-acre area of unincorporated land located within Milpitas SOI and Urban Service Boundary.

Santa Clara County Airport Land-Use Commission

The Airport Land-Use Commission (ALUC) was established to provide for appropriate development of areas surrounding public airports in Santa Clara County. It is intended to minimize the public's exposure to excessive noise and safety hazards, and to ensure that the approaches to airports are kept clear of structures that could pose an aviation safety hazard.

The Santa Clara County Airport Land Use Commission has adopted Comprehensive Land Use Plans (CLUP) for the San Jose International Airport, Moffet Federal Airfield, Reid-Hillview Airport, Palo Alto and San Martin Airports. (CLUP) is intended to be used to safeguard the general welfare of the inhabitants within the vicinity of an airport.

The CLUP regulates land use in three major areas: safety zones, noise zones, and height restrictions. It provides land use compatibility guidelines for lands near the airport, to avert potential safety problems and to ensure unhampered airport operations. Under California Government Code Section 65302.3(a), general plans must be consistent with any airport land use plan adopted pursuant to Public Utilities Code Section 21675.

The San Jose International Airport is the closest airport to Milpitas. Lands within the City of Milpitas Planning Area are not located within any of the airport influence areas identified in the CLUP.

Santa Clara County General Plan

Santa Clara County adopted its General Plan on December 20, 1994. The County's General Plan provides a comprehensive set of goals, policies, and implementing actions to guide the County's growth. Figure 2.0-3 shows land uses within the Milpitas SOI including uses that are under Santa Clara County jurisdiction. The County's General Plan includes the following elements:

- Growth & Development
- Economic Well-Being
- Health

- Transportation
- Housing
- Parks and Recreation
- Resource Conservation
- Safety and Noise
- Governance

The County's General Plan establishes allowed land uses for lands within the City's SOI and Planning Area. While the City of Milpitas General Plan Land Use Map identifies planned land uses within the SOI and Planning Area, Santa Clara County has ultimate land use planning, and project approval authority within the SOI unless the lands are annexed into the City.

Measures I

Measure I is the reincarnation of Measure Z, which was approved by voters in 1998, establishing a 20-year urban growth boundary. The measure limits development in Milpitas to the valley floor and the base of the foothills by prohibiting Milpitas from providing City services to new land use developments in the hillside area, through Dec. 31, 2038.

Measure J

Measure J necessitates voter approval to change the city's existing Hillside Ordinance and Milpitas General Plan land use designations for hillside properties. The measure also requires amendments to the zoning of properties covered by the ordinance to go before voters before becoming effective, through Dec. 31, 2038.

Measure K

Measure K prevents areas in the city designated as parks and open space from being developed as residential, commercial or industrial unless first approved by a two-thirds vote of residents.

City of Milpitas General Plan

The City's current General Plan was adopted in 1994. Amendments to the General Plan include:

- The January 2002 amendment which incorporated the Midtown Specific Plan and included revisions to the General Plan land use map and text for consistency between these documents.

- The June 2008 amendment incorporates the Transit Area Plan, adding new land use designations and references to the area plan.

- The October 2010 amendments consist of text amendments to integrate the City's Park and Recreation Master Plan and Milpitas Bikeway Master Plan as well as other updates to exhibits, tables, and figures, which includes land use designation changes to several creek channels and public right-of-ways.

- Milpitas recently adopted its Housing Element (Adopted April 28, 2015).

City of Milpitas Zoning Ordinance

Title 11 of the Milpitas Municipal Code is the City's Planning and Zoning Ordinance. The Planning and Zoning Ordinance carries out the policies of the General Plan by classifying and regulating the uses of land and structures within the City, consistent with the General Plan. The Planning and Zoning Ordinance is adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City.

Zoning provides a legal mechanism for local government regulation of the land uses described in the General Plan Land Use Map. In addition to providing specific regulations related to minimum lot size, building heights, setbacks, lot coverage, etc., for each zoning district, the Zoning Ordinance also lists the uses that would be acceptable or could be considered in each district, as well as those that would be considered unacceptable. For some uses, further regulations are established. Zoning regulations designate the permitting process that applies for approval of land uses in the zoning district.

3.10.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on land use and population if it will:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;
- 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); or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: General Plan implementation would not physically divide an established community (Less than Significant)

The proposed General Plan establishes the City's vision for future growth and development. Goal LU-5 aims to ensure that new development is compatible with existing development in order to maintain a high quality of life for residents, while supporting successful business operations.

The land uses allowed under the proposed General Plan (Figure 2.0-3) provide opportunities for cohesive new growth at in-fill locations within existing urbanized areas of the city, and would not create physical division within the community. New development and redevelopment projects would be designed to complement the character of the existing community and neighborhoods and provide connectivity between existing development and new development. The proposed General Plan Land Use Map designates sites for a range of developed uses as well as open space. The proposed General Plan does not include any new areas designated for urbanization or new roadways, infrastructure, or other features that would divide existing communities. The proposed General Plan would have a **less than significant** impact associated with the physical division of an established community. The policies listed below would ensure that future development is compatible with adjacent communities and land issues.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

Policy LU 5-1: Require new development and redevelopment to be compatible, complementary and, where appropriate, well integrated with existing residential areas. Integrate new large-scale development projects into the fabric of the existing community rather than allowing projects to be insular and self-contained, walled off, or physically divided from surrounding uses. Improve connectivity between neighborhoods and services with new development. Tie circulation systems and open spaces into existing streets and open spaces. Reduce unnecessary barriers and improve

connections between neighborhoods and services by retrofitting existing development over time as area improvements or redevelopment occurs.

Policy LU 5-2: Prohibit incompatible uses and inappropriate development in and near residential neighborhoods. As feasible, promote gradual transitions from high density development to surrounding low density neighborhoods in both building forms and land use.

Policy LU 5-3: Ensure new development is consistent with specific height limits established within the City's Zoning Ordinance as applied through the zoning district for all properties within the City.

Policy LU 5-4: Prohibit the establishment or encroachment of incompatible uses into industrial and manufacturing designated lands, and prohibit new uses which would result in the imposition of additional operational restrictions and/or mitigation requirements on industrial and manufacturing users due to land use incompatibility.

Policy LU 5-5: Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses, and other features including rail corridors, high-voltage power lines and high-volume roadways.

Policy LU 5-6: In existing industrial and manufacturing areas adjacent to neighborhoods and other sensitive receptors, promote clean creative industrial uses that are environmentally sustainable and do not create nuisances such as noise and odors.

Policy LU 5-7: In considering land use change requests, consider factors such as compatibility with the residential surroundings, privacy, noise, and changes in traffic levels on residential streets.

ACTIONS IN SUPPORT OF GOAL LU-5:

Action LU-5a: Through the development review and permit process, screen development proposals for land use and transportation network compatibility, including compatibility with existing surrounding or abutting development or neighborhoods.

Action LU-5b: Through the development review and permit process, analyze compatibility and require adequate buffers and/or architectural consideration to protect residential areas, developed or undeveloped, from intrusion of private nonresidential development activities that may degrade the quality of life in residential areas while continuing to promote a mix of uses that encourage people to access goods and services in their communities without driving.

Action LU-5c: Consider establishing an incentive program to encourage non-conforming properties and uses to redevelop as conforming uses.

Impact 3.10-2: General Plan implementation would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (Less than Significant)

STATE PLANS

The proposed General Plan was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. Discussion of the proposed General Plan's consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, traffic, water quality, etc.) is provided in the relevant chapters of this Draft EIR. The State would continue to have authority over any State-owned lands in the vicinity of the city and the proposed General Plan would not conflict with continued application of State land use plans, policies, and regulations adopted to avoid or mitigate environmental effects.

CITY PLANS

As set forth by State law, the General Plan serves as the primary planning document for the City and subordinate documents and plans would be updated to be consistent with the General Plan. Similar to the existing General Plan, the proposed General Plan focuses on a balanced land use pattern, creating a community where new development blends with existing neighborhoods, and promoting the City as a desirable place to live and work. The proposed General Plan carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection. The proposed General Plan would require modifications to the City's Zoning Ordinance to provide consistency between the General Plan and zoning; however, these modifications will not remove or adversely modify portions of the Milpitas Municipal Code that were adopted to mitigate an environmental effect.

Subsequent development and infrastructure projects would be required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of future development projects. Any potential environmental impact associated with conflicts with land use requirements would be **less than significant**. The policies listed below would ensure that the General Plan does not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

<u>Policy LU 2-1:</u> Utilize Specific Plans to guide development within Milpitas's special planning areas. Properties located within Specific Plan areas shall conform to the underlying Specific Plan's land uses, zoning, and development standards.

Policy LU 2-2: Continue to utilize Overlay Zoning Districts as needed to supplement land use and zoning standards with additional allowances and regulations that reflect land use and policy objectives for a particular area.

Policy LU 2-3: Allow densities and intensities which exceed the generally allowed ranges defined by the underlying land use for projects utilizing Density Bonus provisions (included within the Milpitas Affordable Housing Ordinance Title XII - HOUSING Chapter 1 - AFFORDABLE HOUSING ORDINANCE) including bonuses for senior housing, affordable housing, and for projects within designated overlay districts included in Milpitas Municipal Code Section 12 - Overlay Districts and Standards.

Policy LU 2-4: Utilize Planned Development (PD) zoning to provide flexibility in the application of the zoning code to encourage more desirable site planning outcomes, or achieve particular mixes of desired uses or unit types.

Policy LU 2-5: Consistent with the Milpitas municipal code, the City should continue to utilize the following Overlay Districts in areas where special uses and development standards are desired.

- *XI-10-12.06 - Transit Oriented Development (-TOD) Overlay District*
- *XI-10-12.02 - Gateway Office (-OO) Overlay District*
- *XI-10-12.07 - Recreation and Entertainment (-RE) Overlay District*
- *XI-10-12.03 - High Rise (-HR) Overlay District*
- *XI-10-12.04 - Mobile Home Park (-MHP) Overlay District*
- *XI-10-12.05 - Site and Architectural (-S) Overlay District*
- *XI-10-12.08 - Freeway Corridor (-FC) Overlay District*

LAND USE ELEMENT ACTIONS

Action LU-1a: Update the City's Zoning Map as appropriate to ensure consistency with the land use designations shown on Figure LU-1.

Action LU-2a: Periodically review and maintain the goals, and development standards and guidelines included within Milpitas's Specific Plan Areas to affirm the unique character and development vision for Special Planning Areas within Milpitas. Specifically, the city should:

- *Maintain and implement the Midtown Specific Plan goals, policies and development standards and guidelines to create a mixed-use community that includes high-density, transit-oriented housing and a central community 'gathering place' while maintaining needed industrial, service and commercial uses.*
- *Maintain and implement the Milpitas Metro Specific Plan (formerly the Transit Area Specific Plan, or "TASP") area, as an attractive, high density, TOD urban neighborhood with a mix of land uses around the light rail stations and the BART station. Create safe and attractive pedestrian connections so that residents, visitors, and workers will walk,*

bike, and take transit. Design streets and public spaces to create a lively and attractive street character, and a distinctive identity for each sub-district.

Action LU-2b: Develop and adopt new specific plans in areas where special development standards or guidelines, beyond those identified in the underlying land use designations and zoning standards, are needed or desired in order to carry out a specific vision or goal for the area. Specifically, the City should:

- *Seek to prepare and adopt a specific plan for the California Circle area, as shown on the Land Use Map. Development of the California Circle Specific Plan should address the following priorities and objectives:*
    - *The Specific Plan Land Use Map should include a mix of commercial, office, and industrial park uses, with opportunities for additional residential development in a primarily mixed-use format.*
    - *Establish incentives and provisions for residential density increases for projects with significant affordable housing components.*
    - *Identify improvements to the circulation network, including improved ingress and egress, improved bicycle and pedestrian connectivity, and improved access to trails and linear parkways.*
    - *The provision of new parks and community amenities, including additional open spaces and trails.*
    - *Design standards for improved landscaping, lighting and streetscapes.*
    - *Funding mechanisms to ensure implementation of roadway, infrastructure, and other public improvements shall be established.*
    - *Potential risks to infrastructure and public safety due to flooding or other natural disasters.*

Action LU-2c: Establish and adopt Innovation District Overlay standards and guidelines for the Innovation District Overlay identified on the City's Land Use Map. Standards should:

- *Support opportunities for future development to provide hi-tech jobs, industries, and educational opportunities;*
- *Foster a competitive and desirable district by establishing a sense of place and ensuring that development provides amenities and is connected to nearby community assets;*
- *Act as an incubator for innovation and technology by encouraging developments that offer flexible and shared work spaces, facilitate collaboration, and provide infrastructure for advanced technologies;*

- *Identify funding mechanisms and incentives for infrastructure improvements (including fiber optic and Wi-Fi improvements) that may be desirable for high tech uses; Provide opportunities for increased building intensities within the overlay district;*

- *Continue to support smaller startups and allow for more intensive uses that encourage new firms and high tech uses to locate in this area.*

Impact 3.10-3: General Plan implementation would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (Less than Significant)

The proposed General Plan accommodates future growth in Milpitas, including new businesses, expansion of existing businesses, and new residential uses. Infrastructure and services would need to be extended to accommodate future growth. At full buildout, the proposed General Plan could yield a total of up to 33,401 housing units, a population of 113,530 people, 47,807,536 square feet of non-residential building square footage, and 84,333 jobs within the Planning Area. As shown in Table 2.0-3 of Chapter 2.0, this represents development growth over existing conditions of up to 11,186 new housing units, 37,473 people, 19,729,648 square feet of new non-residential building square footage and 36,795 jobs.

Depending on growth rates, the actual growth during the life of the General Plan could be lower or higher, but would not exceed the theoretical buildout described in Chapter 2.0 (Project Description).

Given the historical and current population, housing, and employment trends, growth in the city, as well as the entire state, is inevitable. The primary factors that account for population growth are natural increase and net migration. The average annual birth rate for California is expected to be 20 births per 1,000 population. Additionally, California is expected to attract more than one third of the country's immigrants. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. While these factors would likely result in growth in Milpitas during the planning period of the proposed General Plan, growth will continue to occur based primarily on the demand of the housing market and demand for new commercial, industrial, and other non-residential uses. As future development occurs under the proposed General Plan, new roads, infrastructure, and services would be necessary to serve the development, and this infrastructure would accommodate planned growth. The proposed General Plan is intended to accommodate the City's fair share of statewide housing needs, which are allocated by the ABAG, based on regional numbers provided by the California Department of Housing and Community Development on a regular basis (every five to eight years).

There are very few areas within the City of Milpitas that are designated for urban land uses which are not already developed. The proposed Land Use Map does not promote the conversion of, or re-designate any of the hillside area lands for urban uses. The Land Use Element and Land Use Map identify new growth that is focused on infill sites distributed throughout the city, with higher density uses focused around major transportation corridors, VTA's Light Rail lines and the Milpitas Transit Center.

The proposed General Plan includes policies and actions that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality effects. Chapters 3.1 through 3.16 and 4.0 provide a discussion of environmental effects associated with development allowed under the proposed General Plan. Each of these EIR chapters include relevant policies and action items that would mitigate potential environmental impacts associated with growth, to the greatest extent feasible.

With implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout this EIR. Therefore, population and housing growth associated with the proposed General Plan would result a **less than significant** impact, as there are no additional potential environmental impacts, beyond those analyzed and disclosed in this EIR, that would result from growth accommodated by the proposed project.

Impact 3.10-4: General Plan implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere (less than significant)

The Housing Element (not updated as part of the Proposed Project) includes Goal B that calls to maintain and preserve housing resources and high-quality residential neighborhoods and preserve existing housing resources, including units affordable to extremely low-, very low-, low-, and moderate-income households and market rate units. This goal is supported by Housing Element Policy B.1 that calls for the enforcement of housing codes and regulations to correct code violations while minimizing the displacement of residents.

The majority of developed land in the Planning Area is comprised of residential uses, which are not anticipated to undergo significant land use changes under the Proposed General Plan. The Proposed General Plan focuses infill development opportunities in vacant and underutilized areas in Milpitas, as well as areas currently developed with commercial uses which may transition to mixed uses in the future. The General Plan Land Use Map was developed to preserve existing neighborhoods throughout the City. Throughout the Planning Area, the Proposed General Plan is projected to increase the overall number of dwelling units and provide housing to serve the diverse needs of the community at various socioeconomic levels. Additionally, the Land Use Element includes policies and actions aimed at preserving housing options, and providing attainable housing opportunities for all residents.

Therefore, impacts of the proposed General Plan on the displacement of people or housing are considered **less than significant**. The policies listed below would further ensure that a range of

housing types are provided in the City, and that housing conditions are evaluated as the housing supply ages.

GENERAL PLAN MINIMIZATION MEASURES

LAND USE ELEMENT POLICIES

Policy LU 1-3: Maintain a supply of developable lands sufficient to meet desired levels of housing, jobs, and economic needs over the planning period.

Policy LU 1-4: Continue to provide for a variety of housing types and densities that meet the needs of individuals and families and offers residents of all income levels, age groups and special needs sufficient housing opportunities and choices for locating in Milpitas. (Additional policies specifically related to Housing are included in the General Plan's Housing Element)

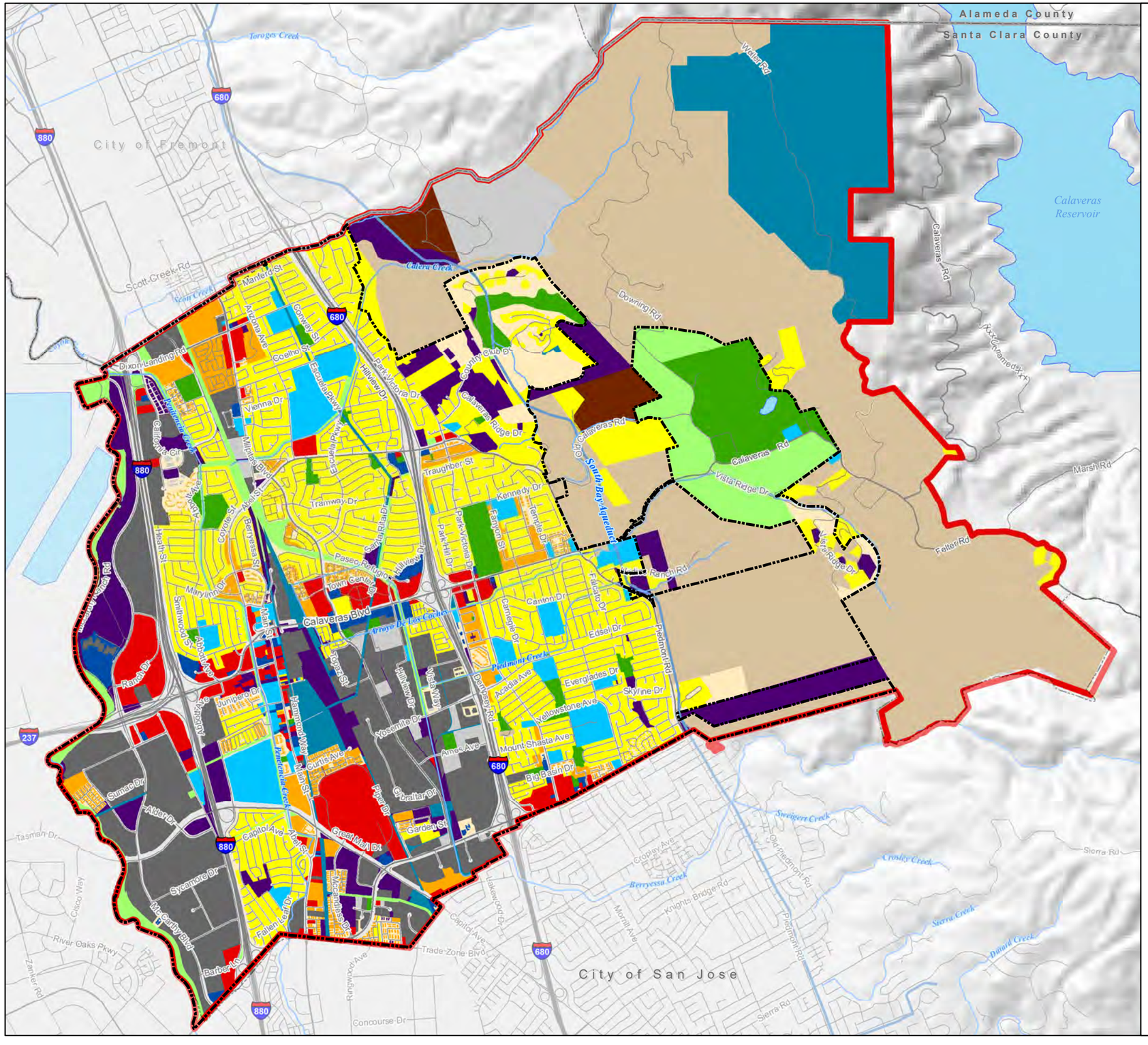
Policy LU 2-3: Allow densities and intensities which exceed the generally allowed ranges defined by the underlying land use for projects utilizing Density Bonus provisions (included within the Milpitas Affordable Housing Ordinance Title XII - HOUSING Chapter 1 - AFFORDABLE HOUSING ORDINANCE) including bonuses for senior housing, affordable housing, and for projects within designated overlay districts included in Milpitas Municipal Code Section 12 - Overlay Districts and Standards.

LAND USE ELEMENT ACTIONS

Action LU-1d: Through the development review and permit process, ensure that residential developments fall within the minimum and maximum density requirements stipulated on the Land Use Map in order to ensure that Milpitas has an ample number of housing units to meet all of its housing needs.

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.10-1. Existing Assessed Uses



Legend

Land Use Category

- Single Family Residential
- Multi-Family Residential
- Commercial
- Industrial Manufacturing
- Industrial Nonmanufacturing
- Institutional
- Office
- Agricultural
- Extractive Land Uses
- Parks and Recreational Facilities
- Open Spaces
- Transportation/Communication/Utilities
- Vacant Urban Lands
- Non-Taxable

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- Other City Boundaries - Fremont and San Jose
- County Boundary

0 ¼ ½
Miles
1:50,000

Sources: Santa Clara County Tax Assessor's Office; DeNovo Land Assessment; City of Milpitas; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; CalAtlas; General Plan Data v3. Map date: October 31, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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This section provides a background discussion and analysis of mineral resources in Milpitas. This section is organized with an environmental setting, regulatory setting, and impact analysis.

No comments were received on this environmental topic during the NOP comment period.

3.11.1 ENVIRONMENTAL SETTING

MINERAL RESOURCE CLASSIFICATION

Pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board oversees the Mineral Resource Zone (MRZ) classification system. The MRZ system characterizes both the location and known/presumed economic value of underlying mineral resources. The mineral resource classification system uses four main MRZs based on the degree of available geologic information, the likelihood of significant mineral resource occurrence, and the known or inferred quantity of significant mineral resources. The four classifications are described in Table 3.11-1 below.

TABLE 3.11-1: MINERAL RESOURCE CLASSIFICATION SYSTEM

CLASSIFICATION	*DESCRIPTION*
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated.
MRZ-4	Areas where available information is inadequate for assignment to any other MRZ classification.

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY, 2002.

MINERAL RESOURCES

Mineral resources of significance found and extracted in Santa Clara County include construction aggregate deposits and, to a lesser extent, salts derived from evaporation ponds at the edge of San Francisco Bay. Because of their different nature, salt evaporation ponds and the policy issues concerning them are not addressed to the extent of construction aggregates. Primary issues regarding construction aggregates are those concerning preservation, environmental impact and reclamation of quarry sites and similar operations.

Construction aggregates, such as sand, gravel, and crushed stone, have many purposes, including road and building construction. For a growing, highly urbanized area such as Santa Clara County, ensuring adequate supplies of such materials from local sources is of fundamental importance to the economy of the county and region. Because transport costs are a significant aspect of overall supply and pricing, it is imperative that local mineral resource supplies be conserved for maximum long term availability. As sand and gravel deposits in the Bay Area have been nearly depleted, it has become necessary to rely primarily upon crushed stone for construction aggregates.

3.11 MINERAL RESOURCES

There are a number of mineral resource deposits in Santa Clara County which are of regional or state-wide significance, as determined by state agencies.

The Planning Area contains four areas identified by the State Geologist as containing Regionally Significant Construction Aggregate Resources. These areas, located in the foothills outside City limits, are part of the South San Francisco Bay Production-Consumption Region and contain sandstone deposits. Three of the sites are located west of the Ed Levin Park along Tularcitos and Loa Caches creeks, and the fourth is along Scott Creek at the County line. All of the areas are being currently quarried.

LOCATION OF PERMITTED AGGREGATE MINES

The California Office of Mine Reclamation periodically publishes a list of qualified permitted aggregate mines regulated under SMARA that is generally referred to as the AB 3098 List. The Public Contract Code precludes mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to State or local agencies. As of April 8, 2016, there are 5 aggregate mines on the AB 3098 list in Santa Clara County. Table 3.11-2 identifies the active aggregate mines located in the county. None of the 5 listed mines are within the Planning Area.

TABLE 3.11-2: AB 3098 LIST – ACTIVE MINES IN SANTA CLARA COUNTY

MINE ID	*MINE NAME*	*MINE OPERATOR*
91-43-0001	Curtner Quarry	Oliver DeSilva, Inc.
91-43-0004	Hanson Permanente Cement Permanente Quarry	Lehigh Southwest Cement Company
91-43-0006	Lexington Quarry	Calmat Co. DBA Vulcan Materials Company
91-43-0007	Steven's Creek Quarry Plant 1	Steven's Creek Quarry, Inc.
91-43-0010	Freeman Quarry	Granite Construction Company

SOURCE: CALIFORNIA DEPARTMENT OF CONSERVATION DIVISION OF MINES AND GEOLOGY, 2016.

The Curtner Quarry (State Mine ID 91-43-0001) is located in an unincorporated part of the County northeast of the City of Milpitas, east of Highway 680, off Scott Creek Road. The County approved the current reclamation plan amendment for this quarry on August 14, 2008.

The Hanson Permanente Cement Quarry (State Mine ID 91-43-0004) is a limestone and aggregate mining operation located in the unincorporated foothills of Santa Clara County, Cupertino. The Hanson Permanente Cement Quarry is an authorized use operating under Use Permit No. 173.023, issued May 8, 1939. The Hanson Permanente Cement Quarry is a "vested mine" operation, as determined by the Board of Supervisors on February 8, 2011. A "vested mine" is a mine that was established legally within the regulations in place at that time, and is allowed to continue until the use ceases. A Reclamation Plan, the document showing how the quarried lands will be restored, was originally approved in 1984 and was amended in 2012.

The Lexington Quarry (State Mine ID 91-43-0006) is located in an unincorporated part of the County east of the Lexington Reservoir, in the Santa Cruz Mountains southeast of the City of Los Gatos. Greywacke sandstone is mined at the quarry for construction aggregate, road base, and general fill. The County certified an EIR and approved a use permit, reclamation plan amendment, and lot line adjustment on June 3, 2010, for a geographic expansion of mining operations and reclamation areas as well as an expansion of the hours of operation.

The Stevens Creek Quarry (State Mine ID 91-43-0007) is located in an unincorporated part of the County, approximately three miles south of Highway 280 and adjacent to the southern boundary of the Permanente Quarry property. The County approved a reclamation plan amendment for the Stevens Creek Quarry in 2009 to addresses compliance issues identified by OMR, including encroachment of quarry slopes at the eastern edge of the mined area, and disturbance of areas outside the approved reclamation plan boundary (an updated planting palette also was approved).

The Freeman Quarry (State Mine ID 91-43-0010) is located in an unincorporated part of the County south of Gilroy and west of Highway 101. The County approved the current reclamation plan amendment for the quarry in 2008. The mine operator has submitted an application to the County for a use permit modification to authorize an expansion of the quarry from 61 acres to 149 acres, expand the allowed hours of materials transportation from 6 AM to 4 PM Monday through Saturday, and to amendment the reclamation plan accordingly. The County issued a Notice of Preparation and, on August 10, 2011, held a public scoping meeting about the project. As of the timing of writing of this environmental analysis, a Draft EIR has not been completed for the project.

3.11.2 REGULATORY SETTING

STATE

Surface Mining and Reclamation Act of 1975

The California Department of Conservation Surface Mining and Reclamation Act of 1975 (§ 2710), also known as SMARA, provides a comprehensive surface mining and reclamation policy that permits the continued mining of minerals, as well as the protection and subsequent beneficial use of the mined and reclaimed land. The purpose of SMARA is to ensure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition and readily adaptable for alternative land uses. The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, wildlife, range and forage, as well as aesthetic enjoyment. Residual hazards to public health and safety are eliminated. These goals are achieved through land use planning by allowing a jurisdiction to balance the economic benefits of resource reclamation with the need to provide other land uses.

If a use is proposed that might threaten the potential recovery of minerals from an area that has been classified mineral resource zone 2 (MRZ-2), SMARA would require the jurisdiction to prepare a statement specifying its reasons for permitting the proposed use, provide public notice of these reasons, and forward a copy of the statement to the State Geologist and the State Mining and

Geology Board (Cal. Pub. Res. Code Section 2762). Lands classified MRZ-2 are areas that contain identified mineral resources.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project may have a significant impact on the environment associated with mineral resources if it would:

1. 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; or
2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.11.3 IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: General Plan implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state (Less than Significant)

The Planning Area contains four areas identified by the State Geologist as containing Regionally Significant Construction Aggregate Resources. These areas, located in the foothills outside City limits, are part of the South San Francisco Bay Production-Consumption Region and contain sandstone deposits. All of the areas are being currently quarried.

Given that the only known identified regional mineral resource areas within the Planning Area are already in operation and are currently quarried there is no additional potential for resource extraction from this MRZ. However, new urban uses are proposed on the hillside portions of the planning area that could impact resource deposits. The implications for land use planning in order to preserve local mineral resources and ensure their future availability are basically two-fold: (a) protecting existing and potential sites from development that would preclude mineral extraction, and (b) assuring that access routes are available to large transport vehicles. New uses proposed on the hillside portions of the planning area include Hillside Very Low Density (HVL) residential, Hillside Low Density (HLD) residential, Hillside Medium Density (HMD) residential. However, proposed new urban uses available for development are within the City of Milpitas city limits and would not be developed within an identified regional mineral resource area or mining operation and therefore would not preclude mineral extraction within existing mineral resources area. Access to mineral resource areas would be considered on a project specific basis. There are no other known mineral deposits or resources within Milpitas that are of significant value to the region or the state. As such, implementation of the proposed General Plan would have a **less than significant** impact on this environmental topic, and no mitigation is required.

Impact 3.11-2: General Plan implementation would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan (Less than Significant)

The Planning Area does not contain sites designated as a locally important mineral resource recovery site by the City's General Plan. The Santa Clara County General Plan identifies important mineral resources within its Planning Area, which includes the hillside areas within the Milpitas SOI. However Implementation of the proposed General Plan would not result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, as the proposed General Plan don't not re-designate any new lands for urban development within the hillside areas within the SOI east of the city limits. Therefore, this impact is considered **less than significant**.

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This section provides a discussion of the regulatory setting and a general description of existing noise sources in the City of Milpitas. The analysis in this section was prepared with assistance from j.c. brennan & associates, Inc. and Saxelby Acoustics.

There were no comments received during the NOP comment period related to this environmental topic.

3.12.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50 percent of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise.

The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to Ldn, but

includes a +3 dB penalty for evening noise. Table 3.12-1 lists several examples of the noise levels associated with common situations.

TABLE 3.12-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL (DBA)	COMMON INDOOR ACTIVITIES
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Traffic Noise Levels

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD 77-108) was used to develop Ldn (24-hour average) noise contours for all highways and major roadways in the General Plan study area. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts hourly Leq values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict Ldn values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour period.

Existing traffic volumes were obtained from the traffic modeling performed for the General Plan study area. Day/night traffic distributions were based upon continuous hourly noise measurement data and j.c. brennan & associates, Inc. file data for similar roadways. Caltrans vehicle truck counts were obtained for SR 237, SR 680 and SR 880. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing conditions. Table 3.12-2 shows the results of this analysis.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segments. In some locations sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the project-area roadway segments analyzed in this report.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in Table 3.12-2 are generally considered to be conservative estimates of noise exposure along roadways in the City of Milpitas. Figure 3.12-1 shows existing citywide traffic noise contours.

TABLE 3.12-2: PREDICTED EXISTING TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVEL AT CLOSEST RECEPTORS (DB, LDN)[1]	DISTANCES TO TRAFFIC NOISE CONTOURS, LDN (FEET)		
			70 DB	65 DB	60 DB
Dixon Landing Rd.	E. of I-880	68.3	54	116	251
Dixon Landing Rd.	W. of N. Milpitas Blvd.	67.9	40	86	186
Dixon Landing Rd.	E. of N. Milpitas Blvd.	66.1	30	65	139
N. Milpitas Blvd.	N. of Dixon Landing Rd.	67.5	51	111	239
N. Milpitas Blvd.	Dixon Landing to Jacklin	67.7	46	99	213
N. Milpitas Blvd.	Jacklin to Calaveras	66.3	34	73	158
S. Milpitas Blvd.	Calaveras to Montague	67.4	40	87	187
North Abel Str.	W. of N. Milpitas Blvd.	65.2	34	72	156
Jacklin Rd.	E. of N. Milpitas Blvd.	63.7	28	61	132
Jacklin Rd./Evans Rd.	E. of N. Park Victoria Dr.	66.5	32	69	150
W. Calaveras Blvd.	W. of S. Abbott Ave.	68.1	97	210	453
W. Calaveras Blvd.	E. of S. Abbott Ave.	71.2	90	195	419
W. Calaveras Blvd.	W. of S. Abel St.	71.8	79	171	368
E. Calaveras Blvd.	W. of S. Milpitas Blvd.	65.3	63	136	293
E. Calaveras Blvd.	E. of S. Milpitas Blvd.	66.3	60	129	278
E. Calaveras Blvd.	E. of S. Park Victoria Dr.	66.9	40	87	187
E. Tasman Dr.	W. of McCarthy Blvd.	64.6	66	142	306
E. Tasman Dr.	E. of McCarthy Blvd	63.6	53	114	245
E. Tasman Dr.	Alder Dr. to I-880	63.2	84	182	391
Great Mall Pkwy	I-880 to S. Abel St.	66.3	68	147	316
Great Mall Pkwy	S. Abel St. to S. Main St.	66.0	62	134	290
Great Mall Pkwy	S. Main St. to McCandless Dr.	62.5	65	139	300
Great Mall Pkwy	E. of McCandless Dr.	63.5	51	111	239
Great Mall Pkwy	W. of Montague Expwy	64.0	56	120	259
E. Capitol Ave	E. of Montague Expwy	68.1	67	145	313
Montague Expwy	E. Capitol Ave. to S. Milpitas Blvd.	64.8	56	121	261
Montague Expwy	E. Capitol Ave. to Trade Zone Blvd.	65.7	57	123	264
Montague Expwy	S. Milpitas to I-680	59.2	52	112	242
Landess Ave.	East of 680	63.5	44	95	205
Montague Expwy	W. of O'Toole Ave.	68.5	111	239	514

ROADWAY	SEGMENT	NOISE LEVEL AT CLOSEST RECEPTORS (DB, LDN)[1]	DISTANCES TO TRAFFIC NOISE CONTOURS, LDN (FEET)		
			70 DB	65 DB	60 DB
Montague Expwy	O'Toole Ave. to I-880	68.4	109	235	507
Montague Expwy	I-880 to S. Main St.	67.4	101	217	468
Montague Expwy	S. Main St. to McCandless Dr.	70.1	102	219	472
SR 237	City wide	73.5	516	1112	2395
SR 680	City wide	77.5	473	1020	2197
SR 880	City wide	80.2	719	1550	3339

NOTES: DISTANCES TO TRAFFIC NOISE CONTOURS ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS.

[1] TRAFFIC NOISE LEVELS ARE PREDICTED AT THE CLOSEST SENSITIVE RECEPTORS

SOURCE: W-TRANS TRANSPORTATION ENGINEERS, CALTRANS, SAXELBY ACOUSTICS, 2020.

Railroad Noise Levels

In order to quantify noise exposure from existing train operations, two continuous (24-hour) noise level measurement surveys were conducted along the existing Santa Clara Valley Transportation Authority (VTA) light rail tracks, near the Cisco station on the VTA Alum Rock – Santa Teresa line. Railroad noise measurements were also conducted along the two Union Pacific (UP) railroad lines which run north/south through the City. For this report, the lines are referred to as either the West or East line.

The purpose of the noise level measurements was to determine typical sound exposure levels (SEL) for railroad line operations, while accounting for the effects of travel speed, warning horns and other factors which may affect noise generation. In addition, the noise measurement equipment was programmed to identify individual train events, so that the typical number of train operations could be determined.

Table 3.12-3 shows a summary of the continuous noise measurement results for railroad activity within the City.

TABLE 3.12-3: RAILROAD NOISE MEASUREMENT RESULTS

MEASUREMENT LOCATION	RAILROAD TRACK	GRADE CROSSING /WARNING HORN	TRAIN EVENTS PER 24-HR PERIOD	AVERAGE SEL AT 100’
Cisco Station Light Rail	VTA	Yes	137 (25 Night)	79 dBA
Site B	UP (East Line)	No	14 (50% night events)	101 dBA
Site C	UP (West Line)	Yes	7 (50% night events)	109 dBA

SOURCE: J.C. BRENNAN & ASSOCIATES, INC - 2016

Noise measurement equipment consisted of Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters equipped with LDL ½" microphones. The measurement systems were calibrated using a LDL Model CAL200 acoustical calibrator before and after testing. The

measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

To determine the distances to the day/night average (Ldn) railroad contours, it is necessary to calculate the Ldn for typical train operations. This was done using the SEL values and above-described number and distribution of daily train operations. The Ldn may be calculated as follows:

$$Ldn = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the mean Sound Exposure Level of the event, N_{eq} is the sum of the number of daytime events (7 a.m. to 10 p.m.) per day, plus 10 times the number of nighttime events (10 p.m. to 7 a.m.) per day, and 49.4 is ten times the logarithm of the number of seconds per day. Based upon the above-described noise level data, number of operations and methods of calculation, the Ldn value for railroad line operations have been calculated, and the distances to the L_{dn} noise level contours are shown in Table 3.12-4.

TABLE 3.12-4: APPROXIMATE DISTANCES TO THE RAILROAD NOISE CONTOURS

EXTERIOR NOISE LEVEL AT 100 FEET, L_{DN}	DISTANCE TO EXTERIOR NOISE LEVEL CONTOURS, FEET		
	60 DB L_{DN}	65 DB L_{DN}	70 DB L_{DN}
VTA ALUM ROCK – SANTA TERESA LINE			
55 dB	48’	22’	10’
UPRR (WEST LINE) – WITH WARNING HORNS			
76 dB	1199’	556’	258’
UPRR (WEST LINE) – WITHOUT WARNING HORNS			
67 dB	284’	132’	61’

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

Fixed Noise Sources

The production of noise is a result of many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by federal and state employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational and public service facility activities can also produce noise which affects adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components which have a potential to annoy individuals who live nearby. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day and existing ambient noise levels.

In the City of Milpitas, fixed noise sources typically include parking lots, loading docks, parks, schools, and other commercial/retail use noise sources (HVAC, exhaust fans, etc.)

From a land use planning perspective, fixed-source noise control issues focus upon two goals:

1. To prevent the introduction of new noise-producing uses in noise-sensitive areas, and
2. To prevent encroachment of noise sensitive uses upon existing noise-producing facilities.

The first goal can be achieved by applying noise level performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in near proximity to noise-producing facilities include mitigation measures that would ensure compliance with noise performance standards.

Fixed noise sources which are typically of concern include but are not limited to the following:

- HVAC Systems
- Pump Stations
- Steam Valves
- Generators
- Air Compressors
- Conveyor Systems
- Pile Drivers
- Drill Rigs
- Welders
- Outdoor Speakers
- Chippers
- Loading Docks
- Cooling Towers/Evaporative Condensers
- Lift Stations
- Steam Turbines
- Fans
- Heavy Equipment
- Transformers
- Grinders
- Gas or Diesel Motors
- Cutting Equipment
- Blowers
- Cutting Equipment
- Amplified music and voice

The types of uses which may typically produce the noise sources described above, include, but are not limited to: wood processing facilities, pump stations, industrial/agricultural facilities, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, special events such as concerts, and athletic fields. Typical noise levels associated with various types of stationary noise sources are shown in Table 3.12-5.

TABLE 3.12-5: TYPICAL STATIONARY SOURCE NOISE LEVELS

USE	NOISE LEVEL AT 100 FEET, LEQ [1]	DISTANCE TO NOISE CONTOURS, FEET			
		50 DB LEQ (NO SHIELDING)	45 DB LEQ (NO SHIELDING)	50 DB LEQ (WITH 5 DB SHIELDING)	45 DB LEQ (WITH 5 DB SHIELDING)
Auto Body Shop	56 dB	200	355	112	200
Auto Repair (Light)	53 dB	141	251	79	141
Busy Parking Lot	54 dB	158	281	89	158
Cabinet Shop	62 dB	398	708	224	398
Car Wash	63 dB	446	792	251	446
Cooling Tower	69 dB	889	1,581	500	889
Loading Dock	66 dB	596	1,059	335	596
Lumber Yard	68 dB	794	1,413	447	794
Maintenance Yard	68 dB	794	1,413	447	794
Outdoor Music Venue	90 dB	10,000	17,783	5,623	10,000
Paint Booth Exhaust	61 dB	355	631	200	355
Skate Park	60 dB	316	562	178	316
School Playground / Neighborhood Park	54 dB	158	281	89	158
Truck Circulation	48 dB	84	149	47	84
Vendor Deliveries	58 dB	251	446	141	251

[1] Analysis assumes a source-receiver distance of approximately 100 feet, no shielding, and flat topography. Actual noise levels will vary depending on site conditions and intensity of the use. This information is intended as a general rule only, and is not suitable for final site-specific noise studies.

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

MILPITAS MATERIALS COMPANY CONCRETE PLANT

One notable fixed noise source in Milpitas is the Milpitas Materials Company concrete plant. Operations at such a plant have the potential to generate significant noise levels. Therefore, a noise measurement of the Milpitas Materials Company concrete plant operations was conducted at a distance of 270 feet from the main plant during operation on June 21, 2016. The plant generated noise levels of 64 dBA L_{eq} at this distance. Noise sources included concrete trucks as well as plant operations.

COMMUNITY NOISE SURVEY

A community noise survey was conducted to document ambient noise levels at various locations throughout the City. Short-term noise measurements were conducted at seven locations throughout the City on June 21st and 22nd, 2016 during daytime and evening periods. In addition, four continuous 24-hour noise monitoring sites were also conducted to record day-night statistical noise level trends. The data collected included the hourly average (Leq), median (L50), and the maximum level (Lmax) during the measurement period. Noise monitoring sites and the measured noise levels at each site are summarized in Table 3.12-6 and Table 3.12-7. Figure 3.12-2 shows the locations of the noise monitoring sites.

Community noise monitoring equipment included Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters equipped with LDL ½" microphones. The measurement systems were calibrated using a LDL Model CAL200 acoustical calibrator before and after testing. The measurement equipment meets all of the pertinent requirements of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

TABLE 3.12-6: EXISTING CONTINUOUS 24-HOUR AMBIENT NOISE MONITORING RESULTS

SITE	LOCATION	LDN (DBA)	MEASURED HOURLY NOISE LEVELS, DBA LOW-HIGH (AVERAGE)					
			DAYTIME (7:00 AM - 10:00 PM)			NIGHTTIME (10:00 PM – 7:00 AM)		
			LEQ	L50	LMAX	LEQ	L50	LMAX
A	Interstate 880, 240 ft to centerline.	73	67-69 (69)	66-69 (68)	76-90 (81)	60-69 (65)	59-69 (63)	70-85 (78)
B	Park Metro East, 60 ft from rail line sound wall (+/- 14' tall).	61	51-64 (56)	50-53 (52)	63-89 (72)	48-59 (54)	48-53 (50)	53-89 (67)
C	Hammond Way and East Curtis Ave., 120 ft from rail line.	76	58-74 (67)	53-59 (55)	72-104 (90)	53-80 (70)	42-56 (48)	72-108 (85)
D	N. Park Victoria Dr. and Wessex Pl., 75 ft from Interstate 680 sound wall.	69	63-69 (66)	62-67 (65)	76-92 (79)	55-66 (62)	54-66 (59)	70-79 (75)

SOURCE – J.C. BRENNAN & ASSOCIATES, INC. – 2016.

TABLE 3.12-7: EXISTING SHORT-TERM COMMUNITY NOISE MONITORING RESULTS

SITE	LOCATION	TIME[1]	MEASURED SOUND LEVEL, DB			NOTES
			LEQ	L50	LMAX	
1	Behind Tuff Shed at Cadillac Ct.	3:22 p.m.	78	78	81	I-880 is the primary noise source.
		7:33 a.m.	77	77	80	I-880 is the primary noise source. Shipping trucks idling.
2	Day Star Montessori School at 215 Dempsey Rd.	4:43 p.m.	76	76	80	I-680 is the primary noise source.
		8:51 a.m.	76	76	79	I-680 is primary noise source. Construction on Dempsey Rd.
3	Landess Ave. across from Paris Way.	6:03 p.m.	65	62	76	Landess Avenue is the primary noise source. Commercial aircraft overhead.
		9:47 a.m.	60	55	73	Landess Avenue is the primary noise source.
4	7-Eleven at Dixon Landing Rd. and Milmont Dr.	3:51 p.m.	64	62	76	Dixon Landing Rd. is the primary noise source.
		7:58 a.m.	65	64	73	Dixon Landing Rd. is primary noise source. Construction on Dixon Landing Rd.
5	Piedmont Rd. near St. John Catholic Cemetery.	5:37 p.m.	63	62	69	Piedmont Rd. is primary noise source. Commercial aircraft overhead.
		9:31 a.m.	59	56	66	Piedmont Rd. is primary noise source. Commercial aircraft overhead.
6	7-Eleven on N. Milpitas Blvd.	4:16 p.m.	71	66	86	N. Milpitas Blvd. is primary noise source.
		8:24 a.m.	67	65	77	N. Milpitas Blvd. is primary noise source.
7	Ed Levin County Park/ Spring Valley Golf Course on Calaveras Rd.	5:07 p.m.	61	54	77	Primary noise source is Calaveras Rd.
		9:11 a.m.	54	43	69	Primary noise sources are Calaveras Rd., golf course, and wildlife.

1 - ALL COMMUNITY NOISE MEASUREMENT SITES HAVE A TEST DURATION OF 10:00 MINUTES.

SOURCE - J.C. BRENNAN & ASSOCIATES, INC. 2016.

The results of the community noise survey shown in Table 3.12-6 and 3.12-7 indicate that existing transportation (traffic) noise sources were the major contributor of noise observed during daytime hours, especially during vehicle pass-bys.

3.12.2 REGULATORY FRAMEWORK

FEDERAL

Federal Highway Administration (FHWA)

The FHWA has developed noise abatement criteria that are used for federally funded roadway projects or projects that require federal review. These criteria are discussed in detail in Title 23 Part 772 of the Federal Code of Regulations (23CFR772).

Environmental Protection Agency (EPA)

The EPA has identified the relationship between noise levels and human response. The EPA has determined that over a 24-hour period, an Leq of 70 dBA will result in some hearing loss. Interference with activity and annoyance will not occur if exterior levels are maintained at an Leq of 55 dBA and interior levels at or below 45 dBA. Although these levels are relevant for planning and design and useful for informational purposes, they are not land use planning criteria because they do not consider economic cost, technical feasibility, or the needs of the community.

The EPA has set 55 dBA Ldn as the basic goal for residential environments. However, other federal agencies, in consideration of their own program requirements and goals, as well as difficulty of actually achieving a goal of 55 dBA Ldn, have generally agreed on the 65 dBA Ldn level as being appropriate for residential uses. At 65 dBA Ldn activity interference is kept to a minimum, and annoyance levels are still low. It is also a level that can realistically be achieved.

The Department of Housing and Urban Development (HUD) was established in response to the Urban Development Act of 1965 (Public Law 90-448). HUD was tasked by the Housing and Urban Development Act of 1965 (Public Law 89-117) "to determine feasible methods of reducing the economic loss and hardships suffered by homeowners as a result of the depreciation in the value of their properties following the construction of airports in the vicinity of their homes."

HUD first issued formal requirements related specifically to noise in 1971 (HUD Circular 1390.2). These requirements contained standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established the following three zones:

- 65 dBA Ldn or less - an acceptable zone where all projects could be approved.
- Exceeding 65 dBA Ldn but not exceeding 75 dBA Ldn - a normally unacceptable zone where mitigation measures would be required and each project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation provided by standard construction required in a 65 to 70 dBA Ldn area and 10 dBA of attenuation in a 70 to 75 dBA Ldn area.
- Exceeding 75 dBA Ldn - an unacceptable zone in which projects would not, as a rule, be approved.

HUD's regulations do not include interior noise standards. Rather a goal of 45 dBA Ldn is set forth and attenuation requirements are geared towards achieving that goal. HUD assumes that using standard construction techniques, any building will provide sufficient attenuation so that if the exterior level is 65 dBA Ldn or less, the interior level will be 45 dBA Ldn or less. Thus, structural attenuation is assumed at 20 dBA. However, HUD regulations were promulgated solely for residential development requiring government funding and are not related to the operation of schools or churches.

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Noise exposure of this type is dependent on work conditions and is addressed through a facility's or construction contractor's health and safety plan. With the exception of construction workers involved in facility construction, occupational noise is irrelevant to this study and is not addressed further in this document.

STATE

California Department of Transportation (Caltrans)

Caltrans has adopted policy and guidelines relating to traffic noise as outlined in the Traffic Noise Analysis Protocol (Caltrans 2011). The noise abatement criteria specified in the protocol are the same as those specified by FHWA.

Governor's Office of Planning and Research (OPR)

OPR has developed guidelines for the preparation of general plans (Office of Planning and Research, 2003). The guidelines include land use compatibility guidelines for noise exposure.

LOCAL

Existing City Noise Thresholds

The City of Milpitas General Plan Noise Element establishes goals and policies, as well as criteria for evaluating the compatibility of individual land uses with respect to noise exposure. The intent is to provide guidance for determining noise impacts due to, and upon proposed projects. The existing Guiding Principles and Policies of the City's General Plan Noise Element are provided below:

Guiding Principles

6-G-1	**Maintain land use compatibility with noise levels similar to those set by State Guidelines**
6-G-2	**Minimize unnecessary, annoying, or injurious noise.**

Implementing Policies

Uses and Standards

6-I-1 Use the guidelines in Table 3.12-8 (Noise and Land Use Compatibility) as review criteria for development projects.

6-I-2 Require an acoustical analysis for projects located within a "conditionally acceptable" or "normally unacceptable" exterior noise exposure area. Require mitigation measures to reduce noise to acceptable levels.

6-I-3 Prohibit new construction where the exterior noise exposure is considered "clearly unacceptable" for the use proposed.

6-I-4 Where actual or projected rear yard and exterior common open space noise exposure exceeds the "normally acceptable" levels for new single family and multifamily residential projects, use mitigation measures to reduce sound levels in those areas to acceptable levels.

6-I-5 All new residential development (single family and multifamily) and lodging facilities must have interior noise levels of 45 dB DNL or less. Mechanical ventilation will be required where use of windows for ventilation will result in higher than 45 dB DNL interior noise levels.

6-I-6 Assist in enforcing compliance with noise emissions standards for all types of vehicles, established by the California Vehicle Code and by federal regulations, through coordination with the Milpitas Police Department, Santa Clara County Sheriff's Department, and the California Highway Patrol.

6-I-7 Avoid residential DNL exposure increases of more than 3 dB or more than 65 dB at the property line, whichever is more restrictive.

Noise Monitoring and Updating

6-I-8 Biennially monitor 24-hour noise exposure at two locations, and shorter duration exposure at six additional locations in the Planning Area.

6-I-9 Enforce the provisions of the City of Milpitas Noise Ordinance and the use of established truck routes.

Methods of Attenuation

6-I-10 Reduce the noise impact in existing residential areas where feasible. Noise mitigation measures should be implemented with the cost shared by public and private agencies and individuals.

6-I-11 Minimize noise impacts on neighbors caused by commercial and industrial projects.

6-I-12 New noise-producing facilities introduced near sensitive land uses which may increase noise levels in excess of "acceptable" levels will be evaluated for impact prior to approval; adequate mitigation at the noise source will be required to protect noise-sensitive land uses.

6-I-13 Restrict the hours of operation, technique, and equipment used in all public and private construction activities to minimize noise impact. Include noise specifications in requests for bids and equipment information.

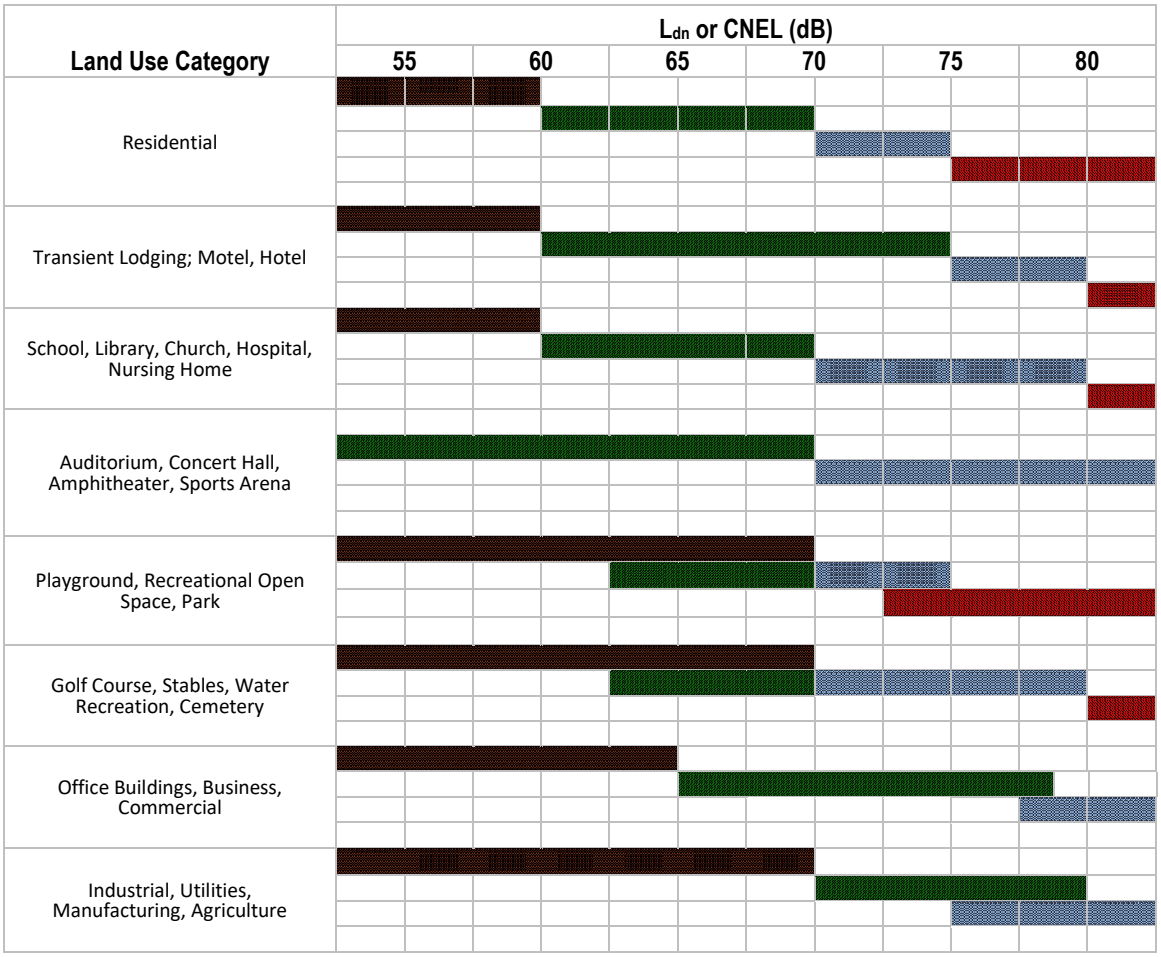
6-I-14 City streets will be designed to reduce noise levels to adjacent areas. This is most effectively implemented through traffic engineering to prevent residential streets from becoming rush-hour thoroughfares, and through enforcement of speed limits. Physical mitigation at the noise source will be required to protect noise-sensitive land uses.

6-I-15 Promote installation of noise barriers along highways and the railroad corridor where substantial land uses of high sensitivity are impacted by unacceptable noise levels.

Coordination with Other Agencies

6-I-16 Work with Caltrans and other agencies on traffic and railroad noise issues and participate in appropriate noise mitigation programs.

TABLE 3.12-8: CITY OF MILPITAS NOISE AND LAND USE COMPATIBILITY STANDARDS



	Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
	Normally Unacceptable	New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.
	Clearly Unacceptable	New construction or development generally should not be undertaken.

SOURCE: State of California, Governor's Office of Planning and Research, 2003. *General Plan Guidelines*.

3.12.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact related to noise if it will result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- 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, expose people residing or working in the project area to excessive noise levels within two miles of a public airport or public use airport; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

IMPACTS AND MITIGATION MEASURES

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions. Table 3.12-9 is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the Ldn.

TABLE 3.12-9: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

SOURCE: FEDERAL INTERAGENCY COMMITTEE ON NOISE (FICON)

Based on the Table 3.12-9 data, an increase in the traffic noise level of 1.5 dB or more would be significant where the pre-project noise level exceeds 65 dB Ldn. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 75 dB Ldn. The rationale for the Table 3.12-9 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

Vibration Standards

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and railroad operations are addressed as potential noise impacts associated with project implementation.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3.12-10 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v).

TABLE 3.12-10: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		*HUMAN REACTION*	*EFFECT ON BUILDINGS*
MM/SEC.	*IN./SEC.*		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

Construction activities may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams, pile drivers) are used. Construction activities often include demolition of existing structures, excavation, site preparation work, foundation work, and new building framing and finishing.

For structural damage, the California Department of Transportation uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV) for buildings structurally sound and designed to modern engineering standards.

Table 3.12-11 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Construction activities such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Jackhammers typically generate vibration levels of 0.035 in/sec PPV and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet.

TABLE 3.12-11: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

EQUIPMENT		PPV AT 25 FT. (IN/SEC)	APPROXIMATE LV AT 25 FT. (VDB)
Pile Driver (Impact)	upper range	1.158	112
	typical	0.644	104
Pile Driver (Sonic)	upper range	0.734	105
	typical	0.170	93
Clam shovel drop		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe ram		0.089	87
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

SOURCE: TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT, UNITED STATES DEPARTMENT OF TRANSPORTATION, OFFICE OF PLANNING AND ENVIRONMENT, FEDERAL TRANSIT ADMINISTRATION, MAY 2006.

IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: General Plan implementation may result in exposure to significant traffic noise sources (Significant and Unavoidable)

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD 77-108) was used to develop Ldn (24-hour average) noise contours for all highways and major roadways in the General Plan study area. The model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model predicts hourly Leq values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict Ldn values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour period.

Existing traffic volumes were obtained from the traffic modeling performed for the General Plan study area. Day/night traffic distributions were based upon continuous hourly noise measurement data and Saxelby Acoustics file data for similar roadways. Caltrans vehicle truck counts were obtained for SR 237, SR 680, and SR 880. Using these data sources and the FHWA traffic noise prediction methodology, traffic noise levels were calculated for existing conditions. Table 3.12-12 shows the results of this analysis.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. In some locations sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is representative of the majority of sensitive receptors located closest to the project-area roadway segments analyzed in this report.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. The distances reported in Table 3.12-12 are generally considered to be conservative estimates of noise exposure along roadways in Milpitas.

Table 3.12-12 shows the future noise levels and the increase in noise levels associated with traffic on the local roadway network under a 20-year circulation system for the proposed General Plan, versus existing conditions. Figure 3.12-3 shows future citywide traffic noise contours.

TABLE 3.12-12: EXISTING CONDITIONS VS. PROPOSED 2040 GENERAL PLAN

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING	PROPOSED	CHANGE	CRITERIA[1]	SIGNIFICANT?
Dixon Landing Rd.	E. of I-880	68.3	70.0	+1.7	+1.5 dB	Yes
Dixon Landing Rd.	W. of N. Milpitas Blvd.	67.9	70.9	+3.0	+1.5 dB	Yes
Dixon Landing Rd.	E. of N. Milpitas Blvd.	66.1	67.9	+1.8	+1.5 dB	Yes
N. Milpitas Blvd.	N. of Dixon Landing Rd.	67.5	69.5	+2.0	+1.5 dB	Yes
N. Milpitas Blvd.	Dixon Landing to Jacklin	67.7	70.6	+2.9	+1.5 dB	Yes
N. Milpitas Blvd.	Jacklin to Calaveras	66.3	68.3	+2.0	+1.5 dB	Yes
S. Milpitas Blvd.	Calaveras to Montague	67.4	69.3	+1.9	+1.5 dB	Yes
North Abel Str.	W. of N. Milpitas Blvd.	65.2	67.3	+2.1	+1.5 dB	Yes
Jacklin Rd.	E. of N. Milpitas Blvd.	63.7	64.2	+0.5	+3.0 dB or >65 dB	No
Jacklin Rd./Evans Rd.	E. of N. Park Victoria Dr.	66.5	67.1	+0.6	+1.5 dB	No
W. Calaveras Blvd.	W. of S. Abbott Ave.	68.1	70.1	+2.0	+1.5 dB	Yes
W. Calaveras Blvd.	E. of S. Abbott Ave.	71.2	73.4	+2.2	+1.5 dB	Yes
W. Calaveras Blvd.	W. of S. Abel St.	71.8	74.1	+2.3	+1.5 dB	Yes
E. Calaveras Blvd.	W. of S. Milpitas Blvd.	65.3	67.9	+2.6	+1.5 dB	Yes
E. Calaveras Blvd.	E. of S. Milpitas Blvd.	66.3	68.8	+2.5	+1.5 dB	Yes
E. Calaveras Blvd.	E. of S. Park Victoria Dr.	66.9	70.4	+3.5	+1.5 dB	Yes
E. Tasman Dr.	W. of McCarthy Blvd.	64.6	65.3	+0.7	+3.0 dB or >65 dB	Yes
E. Tasman Dr.	E. of McCarthy Blvd	63.6	64.7	+1.1	+3.0 dB or >65 dB	No
E. Tasman Dr.	Alder Dr. to I-880	63.2	63.2	+0.0	+3.0 dB or >65 dB	No
Great Mall Pkwy	I-880 to S. Abel St.	66.3	67.8	+1.5	+1.5 dB	Yes
Great Mall Pkwy	S. Abel St. to S. Main St.	66.0	67.2	+1.2	+1.5 dB	No
Great Mall Pkwy	S. Main St. to McCandless Dr.	62.5	64.2	+1.7	+3.0 dB or >65 dB	No
Great Mall Pkwy	E. of McCandless Dr.	63.5	65.2	+1.7	+3.0 dB or >65 dB	Yes
Great Mall Pkwy	W. of Montague Expwy	64.0	66.2	+2.2	+3.0 dB or >65 dB	Yes
E. Capitol Ave	E. of Montague Expwy	68.1	69.2	+1.1	+1.5 dB	No
Montague Expwy	E. Capitol Ave. to S. Milpitas Blvd.	64.8	67.0	+2.2	+3.0 dB or >65 dB	Yes
Montague Expwy	E. Capitol Ave. to Trade Zone Blvd.	65.7	69.2	+3.5	+1.5 dB	Yes
Montague Expwy	S. Milpitas to I-680	59.2	61.5	+2.3	+1.5 dB	Yes
Landess Ave.	East of 680	63.5	64.9	+1.4	+3.0 dB or >65 dB	No
Montague Expwy	W. of O'Toole Ave.	68.5	70.8	+2.3	+1.5 dB	Yes
Montague Expwy	O'Toole Ave. to I-880	68.4	69.4	+1.0	+1.5 dB	No

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Existing	Proposed	Change	Criteria[1]	Significant?
Montague Expwy	I-880 to S. Main St.	67.4	69.4	+2.0	+1.5 dB	Yes
Montague Expwy	S. Main St. to McCandless Dr.	70.1	72.3	+1.2	+1.5 dB	No
SR 237	City wide	73.5	74.4	+0.9	+1.5 dB	No
SR 680	City wide	77.5	78.9	+1.4	+1.5 dB	No
SR 880	City wide	80.2	81.0	+0.8	+1.5 dB	No

[1] Where existing noise levels are less than 60 dB an increase of 5 dB would be a significant increase. Where existing noise levels exceed 60 dB but are less than 65 dB, an increase of 3 dB or more would be significant. Additionally, any increase causing noise levels to exceed the City's Normally Acceptable 65 dB Ldn noise level standard at an existing outdoor activity area of a residential use would also be significant. Where existing noise levels exceed 65 dB, an increase of 1.5 dB or more would be significant.

Source: FHWA-RD-77-108 with inputs from W-Trans and Saxelby Acoustics. 2020.

Buildout of the General Plan may contribute to an exceedance of the City's transportation noise standards and/or result in significant increases in traffic noise levels at existing sensitive receptors. As indicated by Table 3.12-12, the related traffic noise level increases with a 20-year circulation system buildout of the proposed General Plan are predicted to increase between 0.5 to 3.5 dB versus existing conditions.

General Plan Policies N 1-1 through N 1-7, N 1-9, N 1-10 and Actions N 1a, N 1b, N 1e, N 1f, N 1g, N 1h, 1i, and 1k identified below, are intended to minimize exposure to excessive noise, including noise associated with traffic. Specifically, Policies N 1-1 and N 1-2 support noise-compatible land uses in the vicinity of traffic noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1 and N-2. The proposed General Plan standards required under Policy N 1-1 and N 1-2, for exposure to traffic noise shown in Table 3.12-12, meet or exceed the noise level standards of the adopted General Plan shown in Table 3.12-8. Policy N 1-2 and Actions N 1a and N 1b would ensure that new development minimizes potential noise impacts through incorporating the noise control treatments necessary to achieve acceptable noise levels. Policy N 1-6 sets criteria for evaluating future increases in traffic noise levels. Action N 1i and N 1k would ensure that the Municipal Code, including the updated noise ordinance, is consistent with the noise standards established in the General Plan. Action N 1e would encourage working with Caltrans to ensure that adequate noise studies are prepared and that noise mitigation measures are considered in State transportation projects. Implementation of the proposed policies and actions of the General Plan will reduce noise and land use compatibility impacts from vehicular traffic noise sources and would ensure that new development is designed to include noise-attenuating features. However, as shown in Table 3.12-12, the traffic noise increases associated with the proposed General Plan would still exceed the applicable noise exposure criteria. Therefore, the proposed General Plan would have a **significant and unavoidable** impact relative to traffic noise on existing noise-sensitive uses in the City.

GENERAL PLAN MINIMIZATION MEASURES

POLICIES

Policy N 1-1: Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Tables N-1 and N-2 to ensure acceptable noise exposure levels for existing and future development.

Policy N 1-2: Require new development to mitigate excessive noise to the standards indicated in Tables N-1 and N-2 through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

Policy N 1-3: Use sound walls for sound attenuation only when other measures are not practical, or when recommended by an acoustical expert as part of a mitigation measure. Sound walls shall be designed to be aesthetically pleasing, and should incorporate features such as vegetation, variations in color and texture, artwork, and other features deemed appropriate by the City.

Policy N 1-4: Ensure that new development does not result in indoor noise levels exceeding 45 dBA L_{dn} for residential uses by requiring the implementation of construction techniques and noise reduction measures for all new residential development.

Policy N 1-5: Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas; and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element.

Policy N 1-6: For projects that are required to prepare an acoustical study to analyze noise impacts, the following criteria shall be used to determine the significance of those impacts:

STATIONARY AND NON-TRANSPORTATION NOISE SOURCES

- A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element. In instances where the ambient noise level is already above the standards contained in this element, a significant impact will occur if the project will result in an increase in ambient noise levels by more than 3 dB. This does not apply to temporary construction activities.

TRANSPORTATION NOISE SOURCES

- Where existing traffic noise levels are 60 dB L_{dn} or less at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in roadway noise levels will be considered significant;

- Where existing traffic noise levels are greater than 60 dB L_{dn} and up to 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in roadway noise levels will be considered significant; and

- Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB L_{dn} increase in roadway noise levels will be considered significant.

Policy N 1-7: Support noise-compatible land uses along Interstates 680 and 880, Highway 237, and other high-volume roadways.

Policy N 1-9: Implement a range of traffic control measures, including but not limited to, light timing, asphalt alternatives (such as rubberized asphalt), and speed reduction measures to reduce roadway noise.

Policy N 1-10: Work with Regional, State, and Federal agencies, including but not limited to, Caltrans, BART, VTA, and Santa Clara County to ensure that adequate noise studies are prepared prior to the approval of State and Regional transportation and infrastructure projects. Strongly encourage these agencies to ensure that that adequate noise mitigation measures are incorporated into future projects to protect Milpitas residents and businesses from exposure to excessive noise levels.

NON-TRANSPORTATION NOISE

ACTIONS

Actions in Support of Goal N1

Action N 1a: Require that new development projects are reviewed for compliance with the noise requirements established in this element, including the standards established in Tables N-1 and N-2, prior to project approval.

Action N 1b: Require acoustical studies for new development projects which have the potential to generate noise impacts which exceed the standards identified in this element. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to ensure compliance with the noise standards included in this element. Studies shall be conducted by a qualified acoustical professional.

Action N 1e: Coordinate with Caltrans, VTA, BART, local school districts, Santa Clara County, and the cities of San Jose, and Fremont when necessary, to ensure that these

agencies obtain City concurrence prior to initiating or approving any noise generating projects affecting Milpitas.

Action N 1f: Petition State and Regional agencies to install "quiet pavement" materials during roadway improvement and resurfacing activities. Utilize quiet pavement materials on City-owned streets to the greatest extent feasible.

Action N 1g: Develop a prioritization list of City-maintained streets that may be suitable for resurfacing with quiet pavement materials. The list should be developed to reduce roadway noise exposure in areas with excessive roadway noise, and should correspond to City plans to resurface streets that have poor pavement conditions.

Action N 1h: Explore and consider rebate, incentive, and educational opportunities to reduce community noise, while providing co-benefits of community health and environmental stewardship. Programs could include electric lawn and garden equipment upgrade programs, dual pane/noise rated window upgrades, and other appropriate programs which coincide with energy reduction, community health, and sustainability objectives identified by the General Plan, and Climate Action Plan.

Action N 1i: Periodically review and update as necessary Milpitas's Municipal Code to ensure the City's noise goals and priorities of the General Plan are being implemented.

Action N 1k: Update Title V, Chapter 213 – (Noise Abatement) of the Milpitas Municipal Code as necessary to comply with noise standards and criteria set by this element.

Impact 3.12-2: General Plan implementation may result in exposure to excessive railroad noise sources (Less than Significant)

Table 3.12-4 indicates that the 60 dB Ldn railroad noise contours for railroad lines may extend up to 48 feet to 1,199 feet from railroad centerlines. Future development located along these railroad lines could therefore be exposed to unacceptable exterior noise levels.

Policies N 1-1 through N 1-5 and Actions N 1a and N 1b, identified below, are intended to minimize exposure to excessive noise, including noise associated with railroad operations. Specifically, Policy N 1-1 and N 1a support noise-compatible land uses in the vicinity of railroad noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1. Policy N 1-2, N 1-4, and N 1-5 and Actions N 1a and N 1b would ensure that new development mitigates potential noise impacts through incorporating the noise control treatments necessary to achieve acceptable noise levels.

Implementation of these General Plan policies and actions would ensure that development allowed under the proposed General Plan is not exposed to noise levels associated with railroad operations in excess of the City's established standards. This is a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

POLICIES

Policy N 1-1: Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Tables N-1 and N-2 to ensure acceptable noise exposure levels for existing and future development.

Policy N 1-2: Require new development to mitigate excessive noise to the standards indicated in Tables N-1 and N-2 through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

Policy N 1-3: Use sound walls for sound attenuation only when other measures are not practical, or when recommended by an acoustical expert as part of a mitigation measure. Sound walls shall be designed to be aesthetically pleasing, and should incorporate features such as vegetation, variations in color and texture, artwork, and other features deemed appropriate by the City.

Policy N 1-4: Ensure that new development does not result in indoor noise levels exceeding 45 dBA L_{dn} for residential uses by requiring the implementation of construction techniques and noise reduction measures for all new residential development.

Policy N 1-5: Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas; and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element.

ACTIONS

Action N 1a: Require that new development projects are reviewed for compliance with the noise requirements established in this element, including the standards established in Tables N-1 and N-2, prior to project approval.

Action N 1b: Require acoustical studies for new development projects which have the potential to generate noise impacts which exceed the standards identified in this element. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to ensure compliance with the noise standards included in this element. Studies shall be conducted by a qualified acoustical professional.

Impact 3.12-3: Implementation of the General Plan could result in the generation of excessive stationary noise sources (Less than Significant)

Implementation of the General Plan could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. Such land uses may include commercial area loading docks, industrial uses, HVAC equipment, car washes, daycare facilities, auto repair, and recreational uses. While the General Plan does not specifically propose any new noise generating uses, the Land Use Map includes industrial land use designations, which may result in new noise sources. Specific land uses that would be located in the city are not known at this time. Additionally, noise from existing stationary sources, as identified in the background section of this chapter, will continue to impact noise-sensitive land uses in the vicinity. New projects which may include stationary noise sources such as automotive and truck repair facilities, tire installation centers, car washes, loading docks, corporation yards, parks, and play fields may create noise levels in excess of the City's standards.

The General Plan includes policies and actions that are intended to reduce noise associated with stationary sources (listed below). Specifically, Policies N 1-11 though N 1-14 and Actions N 1ab and N 1b would reduce noise associated with stationary sources by requiring the preparation of acoustical studies for proposed commercial and industrial development projects in the vicinity of sensitive noise receptors, and requiring project-specific mitigation in the form of noise attenuation to comply with the noise standards shown in Table N-2 of the proposed General Plan. Implementation of the proposed policies and actions of the General Plan will reduce noise impacts from stationary noise sources to a **less than significant** level.

GENERAL PLAN MINIMIZATION MEASURES

POLICIES

Policy N 1-11: Require non-transportation related noise from site specific noise sources to comply with the standards shown in Table N-2.

Policy N 1-12: Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent sensitive uses through the enforcement of the City's noise standards (see Title V, Chapter 213 of the Milpitas Municipal Code).

Policy N 1-13: Temporary special events including, but not limited to, festivals, concerts, parades, sporting events, and other similar activities may be allowed to exceed the noise standards established in this element, at the discretion of the City on a case-by-case basis, through issuance of a special event permit (see Title XI, Chapter 10, Section 15 - Special Events of the Milpitas Municipal Code). In an effort to promote safe and comfortable noise levels throughout Milpitas, potential adverse noise impacts to communities adjacent to proposed special event locations will be considered as a part of the permit review process

Policy N 1-14: Temporary emergency operations or emergency equipment usage authorized by the City shall be exempt from noise standard criteria set by this element.

ACTIONS

Action N 1a: Require that new development projects are reviewed for compliance with the noise requirements established in this element, including the standards established in Tables N-1 and N-2, prior to project approval.

Action N 1b: Require acoustical studies for new development projects which have the potential to generate noise impacts which exceed the standards identified in this element. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to ensure compliance with the noise standards included in this element. Studies shall be conducted by a qualified acoustical professional.

Impact 3.12-4: General Plan implementation may result in an increase in construction noise sources (Less than Significant)

New development, maintenance of roadways, and installation of public utilities and infrastructure generally require construction activities. These activities include the use of heavy equipment and impact tools. Table 3.12-13 provides a list of the types of equipment which may be associated with construction activities, and their associated noise levels.

TABLE 3.12-13: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	PREDICTED NOISE LEVELS, LMAX DB				DISTANCES TO NOISE CONTOURS (FEET)	
	NOISE LEVEL AT 50'	NOISE LEVEL AT 100'	NOISE LEVEL AT 200'	NOISE LEVEL AT 400'	70 DB LMAX CONTOUR	65 DB LMAX CONTOUR
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006. Saxelby Acoustics 2020.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction could result in periods of significant ambient noise level increases and the potential for annoyance. However, the proposed General Plan includes policies and actions that are intended to reduce noise associated with construction noise (listed below). Specifically, Policy N 1-8 and Action N 1c and N 1d would reduce noise associated with construction noise. Additionally, due to the temporary nature of construction noise, noise increases from construction activities would not lead to ongoing or long-term exceedances of the City's noise standards. The ambient noise standards established by the proposed General Plan do not apply to temporary noise sources, such as construction activities. Implementation of the proposed policies

and actions of the General Plan will reduce noise impacts from construction noise to a **less than significant** level.

GENERAL PLAN MINIMIZATION MEASURES

POLICIES

Policy N 1-8: Require construction activities to comply with standard best practices to reduce noise exposure to adjacent sensitive receptors (see Action N 1d).

ACTIONS

Action N 1c: Require developers to prepare a construction management/noise mitigation plan that defines best management practices to reduce construction noise, and includes proposed truck routes (that comply with Section 12 V-100-12.05 - Truck Routes of the Milpitas Municipal Code) as part of the entitlement process.

Action N 1d: During the environmental review process, determine if proposed construction will constitute a significant impact on nearby sensitive receptors and, if necessary, require mitigation measures in addition to the standard best practice controls. Suggested best practices for control of construction noise include:

- *Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited to between the hours of 7:00 am and 7:00 pm. No construction shall occur on National holidays.*
- *All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited for a duration of longer than five minutes.*
- *Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the*

disturbance coordinator shall be conspicuously posted at the construction site.

Impact 3.12-5: General Plan implementation may result in construction vibration (Less than Significant)

Construction activities facilitated by the proposed General Plan may include demolition of existing structures, site preparation work, excavation of below grade levels, foundation work, pile driving, and new building erection. Demolition for an individual site may last several weeks and at times may produce substantial vibration. Excavation for underground levels may also occur on some project sites and vibratory pile driving could be used to stabilize the walls of the excavated area. Piles or drilled caissons may also be used to support building foundations.

Heavy tracked vehicles (e.g., bulldozers or excavators) can generate distinctly perceptible ground borne vibration levels when this equipment operates within approximately 25 feet of sensitive land uses. Impact pile drivers can generate distinctly perceptible ground borne vibration levels at distances up to about 100 feet, and may exceed building damage thresholds within 25 feet of any building, and within 50-100 feet of a historical building, or building in poor condition. Other construction activities, such as caisson drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may also potentially generate substantial vibration in the immediate vicinity.

Depending on the proximity of existing structures to each construction site, the structural soundness of the existing buildings, and the methods of construction used, vibration levels may be high enough to damage existing structures. Given the scope of the General Plan and the proximity of many existing structures, ground borne vibration impacts would be potentially significant.

As with any type of construction, vibration levels may at times be perceptible. However, construction phases that have the highest potential of producing vibration (pile driving and use of jackhammers and other high-power tools) would be intermittent and would only occur for short periods of time for any individual project site.

General Plan Action N 1d would ensure administrative controls such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration to hours with the least potential to affect nearby businesses, in order to ensure that perceptible vibration can be kept to a minimum, and as such would not result in a significant impact with respect to perception. Therefore, the potential for significant impacts associated with construction vibration is **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

ACTIONS

<u>Action N 1d:</u> During the environmental review process, determine if proposed construction will constitute a significant impact on nearby sensitive receptors and, if necessary, require mitigation measures in addition to the standard best practice controls. Suggested best practices for control of construction noise include:

- *Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited to between the hours of 7:00 am and 7:00 pm. No construction shall occur on National holidays.*
- *All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited for a duration of longer than five minutes.*
- *Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Impact 3.12-6: General Plan implementation may result in exposure to ground borne vibration (Less than Significant)

Development facilitated by the General Plan could expose persons to excessive ground borne vibration levels attributable to trains. The proposed locations of buildings and their specific sensitivity to vibration are not known at this time; however, such uses located in close proximity to railroad tracks could be exposed to ground vibration levels exceeding FTA guidelines.

The proposed General Plan includes Policy N 2-3 requires that individual development projects undergo project-specific environmental review and address potential vibration impacts associated with railroad operations. If project-level significant vibration impacts are identified, specific mitigation measures will be required under CEQA. The implementation of this policy would limit potential ground borne vibrations associated with railroad operations to a **less than significant** level.

GENERAL PLAN POLICIES AND ACTIONS THAT MITIGATE POTENTIAL IMPACTS

POLICY

Policy N 2-3: Consider ground borne vibration and noise nuisance associated with rail operations prior to approving the development of sensitive uses.

ACTIONS

Action N-2b: Review new developments within 100 feet of the rail line to ensure that vibration experienced by residents and sensitive uses would not exceed the Federal Transit Administration guidelines.

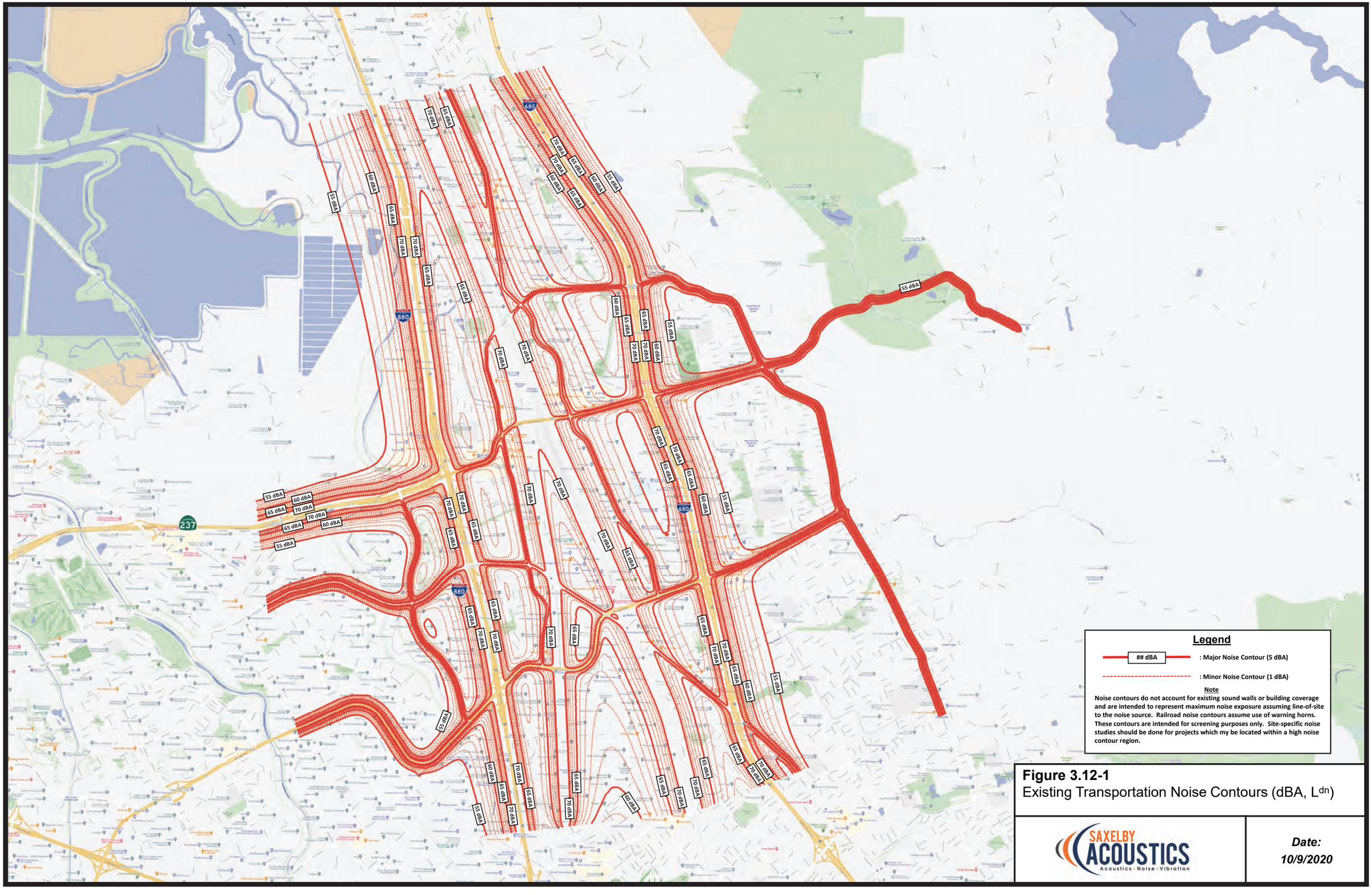


Figure 3.12-1
Existing Transportation Noise Contours (dBA, L^{dn})

SAXELBY ACOUSTICS
Acoustics • Noise • Vibration

Date:
10/9/2020

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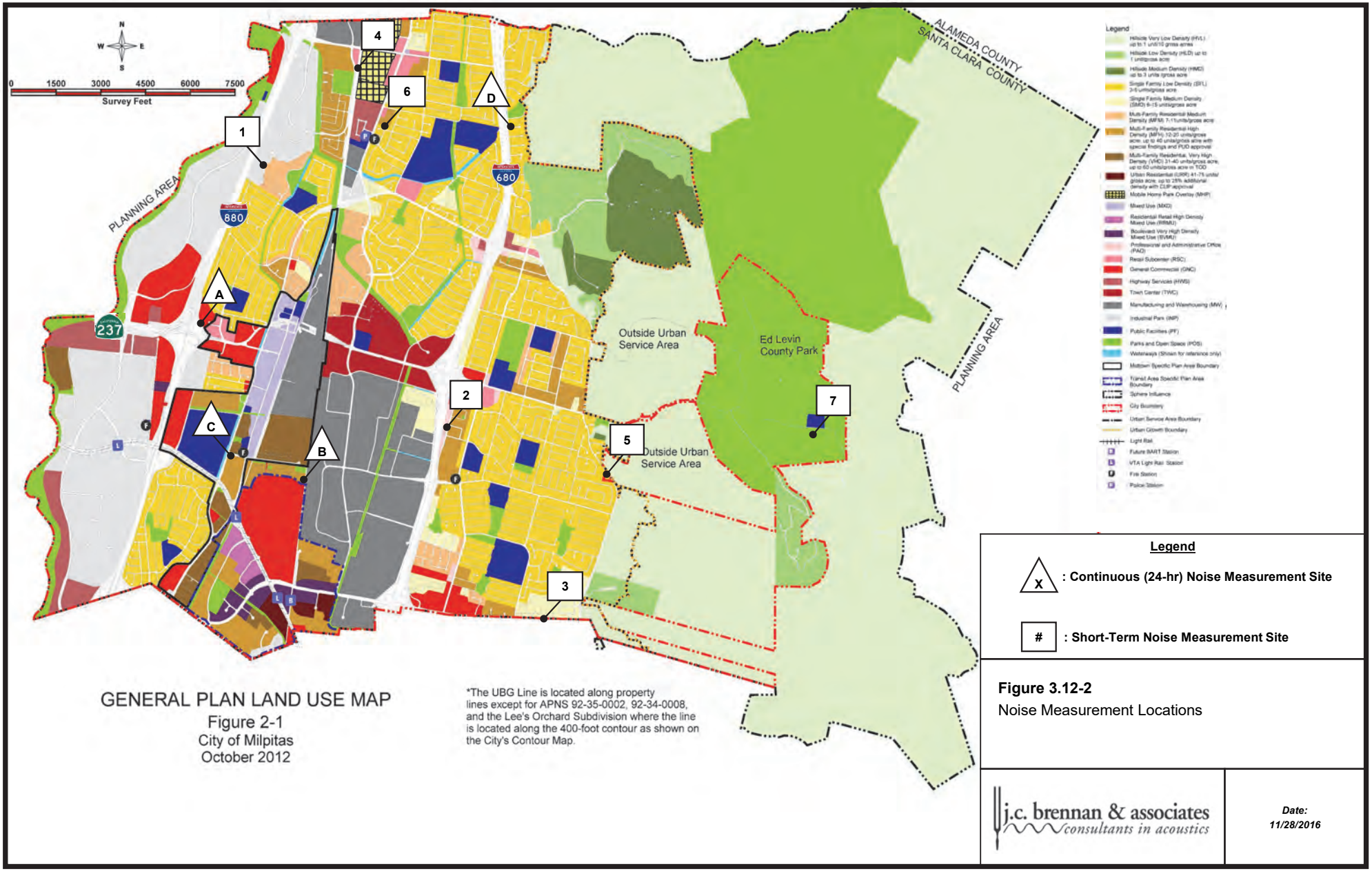

Figure 3.12-2
Noise Measurement Locations

j.c. brennan & associates
consultants in acoustics

Date:
11/28/2016

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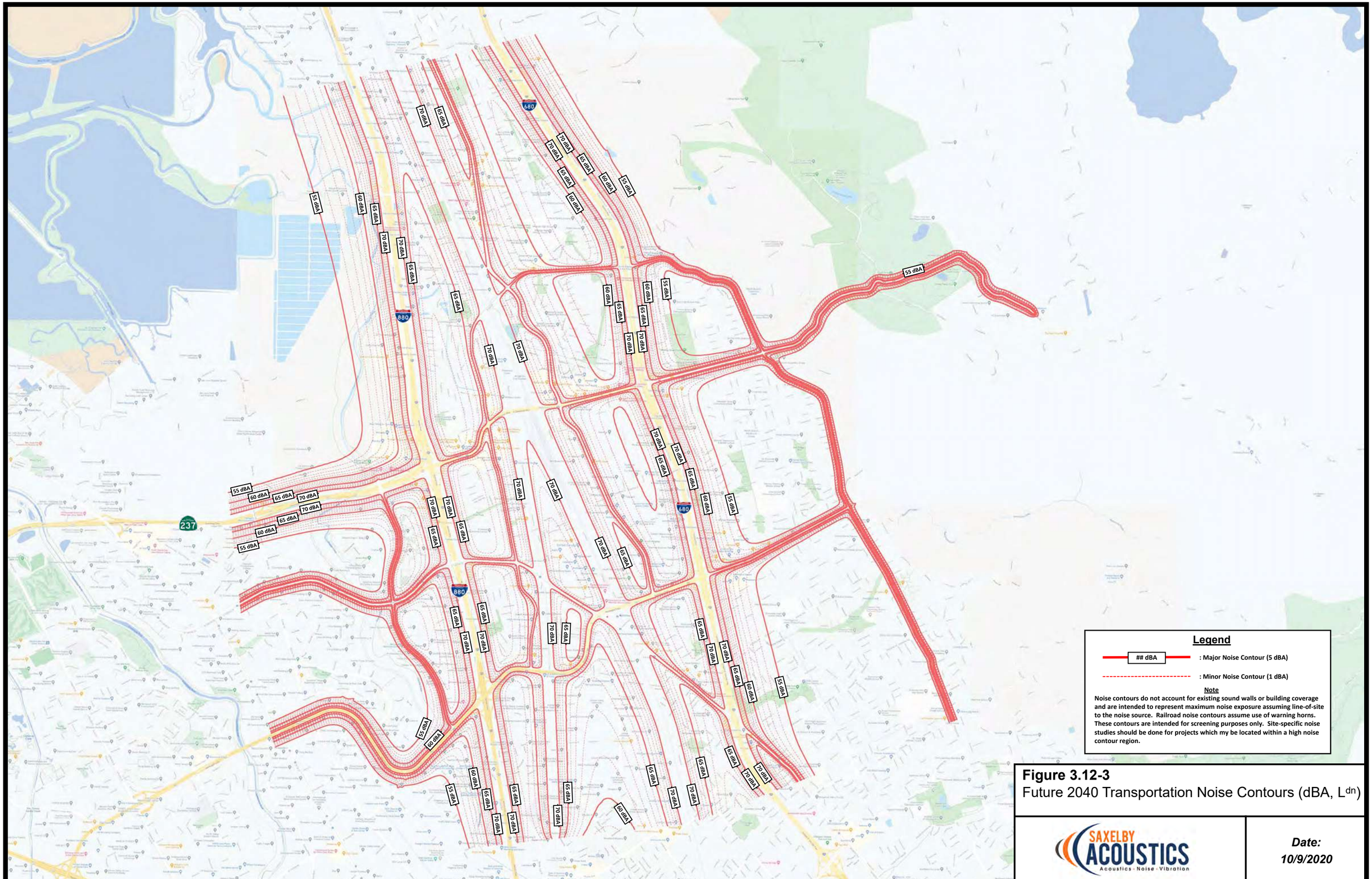

Figure 3.12-3
Future 2040 Transportation Noise Contours (dBA, L^{dn})

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Date:
10/9/2020

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Public services such as fire and police protection are vital to maintaining a safe and healthy community. Educational services serve as a foundation for providing citizens with the skills and resources to excel today and in the future. There are many other public services that are important to a community, such as parks and recreational opportunities, libraries, museums, hospitals, and other healthcare facilities.

This section provides a background discussion and analysis of fire protection services, police services, schools, parks and recreational facilities, libraries, and other community facilities and services. This section is organized with an existing setting, regulatory setting, and impact analysis.

Utilities services, including water, sewer, and solid waste disposal are addressed in Chapter 3.15 (Utilities and Service Systems) of this Draft EIR.

No comments were received during the NOP comment period regarding this environmental topic.

3.13.1 ENVIRONMENTAL SETTING

FIRE PROTECTION SERVICES

The Milpitas Fire Department is responsible for fire suppression, emergency medical services, rescue services, coordination of City-wide disaster response efforts, enforcement of fire and life safety codes, enforcement of State and Federal hazardous materials regulations, and investigation of fire cause, arson and other emergency events for cause and origin.

Office of Emergency Services

The Milpitas Fire Department Office of Emergency Services (OES) coordinates the City's preparedness efforts to mitigate against, plan for, respond to and recover from natural and technological disasters. To meet this commitment, the OES:

- Trains City employees in disaster planning
- Keeps the City's multi-hazard emergency plan current
- Keeps the Emergency Operation Center in a state of readiness
- Manages S.A.F.E., the City's Community Emergency Response Team program
- Supports ARES/RACES, the Amateur Radio auxiliary communications service
- Provides disaster preparedness information to residents and local businesses
- Works closely with the Milpitas Unified School District
- Organizes disaster recovery and relief efforts in cooperation with State OES and the Federal Emergency Management Agency

- Cooperates closely with Santa Clara County OES, all other cities in the County and special districts including the County's flood management agency, the Santa Clara Valley Water District.

Bureau of Fire Prevention

The Milpitas Fire Department Bureau of Prevention has the responsibility and authority to enter, investigate, and perform routine fire inspections of all buildings, structures, and properties in the City with the exception single and multi-family dwellings in which the owner of the property resides.

The Bureau's primary responsibility is enforcement of the California Fire Code and other local fire safety regulations. This includes the inspection of all Life Hazard Use Properties (i.e., gas stations, schools, nursing homes, daycare facilities, auto repair/auto body shops, places of assembly, and large retail operations) and the inspection of Non-Life Hazard businesses, offices, and multi-family residences.

Each fire protection district earns a rating from the Insurance Service Office (ISO). This rating, known as a Public Protection Classification (PPC), is utilized by many insurance providers to calculate insurance premiums within the district. Ratings range from 1 to 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area's fire-suppression program does not meet ISO's minimum criteria.

The PPC ratings are calculated on the following factors:

- Fire alarm and communication systems, including telephone systems, telephone lines, staffing, and dispatching systems;
- The fire department, including equipment, staffing, training, and geographic distribution of fire companies; and,
- The water-supply system, including the condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

Within the Milpitas city limits, the Milpitas Fire Department had an Insurance Service Office (ISO) rating of three (3).

Fire Stations

The Milpitas Fire Department operates four fire stations within its service area, as shown on Figure 3.13-1. Station 1 is located at 777 South Main Street, Station 2 is located at 1263 Yosemite Drive, Station 3 is located at 45 Midwick Drive, and Station 4 is located at 775 Barber Lane.

POLICE PROTECTION SERVICES

Established in 1954, the Milpitas Police Department is a full service law enforcement agency that is charged with the enforcement of local, State, and Federal laws, and with providing 24-hour protection of the lives and property of the public. The Police Department functions both as an

instrument of public service and as a tool for the distribution of information, guidance, and direction. Figure 3.13-1 shows the locations of the Milpitas Police Department, located at 1275 N. Milpitas Boulevard.

The City of Milpitas employs City staff for police and dispatch services. The City contains one police station. In total, there are 93 funded positions and 33 professional staff positions, not including crossing guards or temporary employees. The City reports that response time for in-progress emergency calls averaged 2 minutes and 38 seconds in 2019. The City's goal for response time for in-progress emergency calls is 3 minutes.

In 2019, the Milpitas Police Department handled 76,975 events/calls for service, made 2,016 arrests, issued 5,282 traffic citations, and investigated 610 traffic collisions.

In FY 2014, total City expenditures on this function were $22,069,962. Approximately 35% of the City's General Fund is dedicated to law enforcement. The City provides some specialized law enforcement services, including a computer aided dispatch system, a records management system and a gun range. The City also assigns certain police officers to participate on County enforcement task forces.

Neighborhood Watch Program

Neighborhood Watch is a community-law enforcement partnership and crime prevention program. Through this partnership, Milpitas residents learn how to improve their safety, the security of their property, and foster new relationships with their neighbors and members of the Milpitas Police Department. The Milpitas Neighborhood Watch Program joins the Milpitas Police Department and neighborhood residents in an effort to combat crime and improve the quality of life issues affecting our residents.

The Neighborhood Watch Program is monitored by the Police Community Relations Unit and regular meetings can be held in your neighborhood to discuss issues on home security, recognizing and reporting suspicious activity, personal safety, and problems specific to your own neighborhood. The Neighborhood Watch newsletter is an additional means of communication between the Police Department and the citizens. It is the goal of the Neighborhood Watch Program to empower the community, enhance personal and residential safety, maintain open lines of communication with the Police Department, and improve the quality of life in the City of Milpitas.

Crimes by Category in Milpitas

Statistics on the number of crimes by category of crime in Milpitas during each year from 2013 to 2018, as reported by the Federal Bureau of Investigation (FBI) Criminal Justice Information Services Division, are shown in Table 3.13-1 below.

TABLE 3.13-1: CRIMES BY CATEGORY

CATEGORY	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*
Violent Crimes	93	112	77	96	114	87
Homicide	1	1	1	1	2	0
Forcible Rape	8	14	9	9	12	11
Robbery	56	52	37	52	58	45
Aggravated Assault	28	45	30	34	42	31
Property Crimes	2,067	2,131	1,966	1,791	1,978	1,934
Burglary	291	351	277	202	235	243
Larceny-Theft	1,491	1,453	1,424	1,320	1,447	1,435
Vehicle Theft	285	327	265	269	296	256
Arson	8	9	11	4	4	4

SOURCE: FEDERAL BUREAU OF INVESTIGATION, CRIMINAL JUSTICE INFORMATION SERVICES DIVISION, OFFENSES KNOWN TO LAW ENFORCEMENT TABLES (2013, 2014, 2015, 2016, 2017, AND 2018).

As shown in the table, the majority of crimes committed in Milpitas consist of non-violent property crimes, primarily larceny-theft. Between 2013 and 2018, there were six homicides reported in Milpitas.

Police Response Times

Response times are an important benchmark of police service. Response times can vary greatly depending on the size of the city and department, service delivery standards, geographical location, and overall volume of crime. Calls for service are prioritized into two general categories.

- Priority 1 calls involve an immediate threat to life or crimes that are in progress.
- Priority 2 calls are high priority but do not elevate to the level of an emergency.

The Police Department manages the City's Public Safety Answering Point (PSAP), which also provides Police, Fire, Crossing Guard and Public Works dispatching. In 2019, the PSAP answered 23,026 9-1-1 calls. In 2019, the average officer response time for in-progress emergencies (Priority 1 calls) was 2 minutes 38 seconds. The average officer response time for 'urgent' responses (Priority 2 calls) was 5 minutes 45 seconds.[1]

[1] Email communication with Alexa Wetmore, Milpitas Police Department Crime Analyst. October 28, 2020.

PARKS AND RECREATIONAL FACILITIES

Types of Parks

Parks, trails, and recreational facilities in the City of Milpitas are managed by the Recreation and Community Services Department and maintained by the Public Works Department. The City of Milpitas categorizes each park into separate categories: Community Parks, Neighborhood Parks, Special-use Parks, Urban Parks, Linear Parks, Regional Parks and Private Recreation Facilities. Each type of park is characterized by scale, varying amenities, and the neighborhoods they serve.

The National Recreation and Parks Association (NRPA) has created a set of standards for classification of park and recreation facilities to help serve as a guide to planning. This classification system is to be used as a boilerplate set of standards to be modified to fit the individual municipality's needs. According to the NRPA classification system, parks are usually categorized according to their service area, size, function, and acres/1,000 population. Below are descriptions of the categories of parks as defined by the NRPA, as well as the standards created by the City of Milpitas:

Community parks: Community Parks typically contain regulation-size ball fields and courts, space for informal games and activities, picnic and gathering areas, children play areas and parking. Examples of community parks include Cardoza Park, Dixon Landing Park, and the Milpitas Sports Center.

Neighborhood parks: Neighborhood parks in the City fall into two categories: typical walk to parks that serve the immediate neighborhood, providing open space for informal play, and parks containing a community-use facility, such as a regulation size, prepared ball field. In addition to serving the immediate neighborhood, the latter category also draws people from the larger community, some of whom may drive to the facility.

Special-use parks: This category includes mini-parks, linear parks, creek trails, flood retention areas, publicly accessible private parks, Community Garden, and Community /Civic Center. Additional linear parks through the creek trail system will be developed within the Midtown and Milpitas Metro Plan areas with future residential development.

Urban parks: Urban parks are small facilities, generally less than one acre in size, which accommodate the daily recreation or passive needs of nearby residents. They typically can include children's play areas, sitting areas, outdoor plazaz and limited green space, but are not large enough to contain sports fields.

Linear parks: Linear parks are narrow corridors of land that have been developed primarily as a trail system. Linear parks may also include other small scale facilities such as picnic tables and benches. Milpitas has taken advantage of the Hetch-Hetchy right-of-ways for the development of a linear park system.

Regional parks: Regional parks are generally larger than 100 acres in size and serve the entire City or the region. While regional parks can provide for varying degrees of recreation activity, a portion of the park is generally maintained in a rustic setting for passive recreation use. While a number of regional parks serve Milpitas residents, the Planning Area includes only one such facility, the Ed Levin County Park.

Private recreation facilities: Besides parks and recreation facilities listed above, private recreation facilities in the Planning Area include: Fitness for 10, 24-Hour Fitness, Fitness 19, USA Fitness, South Bay Athletic Cub, Golfland, Summitpointe Golf Course, and Spring Valley Golf Course. Newly developed residential communities contain private recreational facilities and amenities such as pools, community rooms, and playgrounds.

Trails

Trails are a key factor in the development of a city-wide green space network of parks, trails, open space, and recreation facilities. To develop a successful, safe, alternative means of transportation and recreation within the city, four major components/classifications of trails are included in the City's Trails Master Plan. Trails managed and maintained by the City of Milpitas are shown on Figure 3.13-2.

Regional Trails are those routes identified in the Santa Clara County Trails Master Plan as having national, state or regional significance. In Milpitas these are the Coyote Creek Trail, the San Francisco Bay Trail and the Juan Bautista de Anza National Historic Trails (which share the same alignment in Milpitas), and the Bay Area Ridge Trail.

City Trails provide north-south and east-west cross-town routes and extend beyond the City limits to Fremont and San Jose. These trails provide recreation and transportation benefits by linking neighborhoods with employment centers, shopping districts, schools, and transit facilities. City Trails include the Berryessa Creek Trail, Calera Creek Trail, Hetch-Hetchy Trail, Penitencia Creek Trail, and Wrigley Creek/Union Pacific Railroad Trail.

Neighborhood Trails connect homes with schools and parks and provide pedestrian and bicycle access to local shops and markets. They include the Hillcrest Park/Ben Rogers Park Trail, McCarthy Ranch Jogging Trail and Par Course, Rancho Milpitas Middle School/Sinnott School/Murphy Park Trail and the Bob Browne Park Trail.

On-Street Connectors consist of on-street bicycle lanes and routes that link segments of the off-street trail system where no other route is available. They include Calaveras Road, Yosemite Drive and North Park Victoria Drive.

Bikeways: Bikeways are routes used in conjunction with or adjacent to roadways. They can be an important component in commuter transportation development. The City's Bikeways Master Plan defines three types of bikeways:

- Class I Bikeway: "Bike paths" provided within a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized. Caltrans standards require bike paths to have a minimum paved width of eight feet and be completely separated from a street.

- Class II Bikeway: "Bike lanes" provided within a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through traffic by motor vehicles or pedestrians prohibited, but with vehicle parking and cross flows by pedestrians and motorists permitted. Caltrans standards require bike lanes to be striped with a 6-inch solid white line that provides a minimum four-foot exclusive bicycle travel lane.

- Class III Bikeway: "Bike routes" provided within the street right-of-way designated by signs or permanent markings and shared with pedestrians or motorists. Caltrans standards require Class III routes to be marked with appropriate bike route signs.

City Parks

The City is the primary service provider for parks and recreation. The City has 38 parks and a total of approximately 177.8 park acres. In addition, 183 acres of open space owned by the City are publicly accessible. The City operates one community center, one sports center, one senior center, one satellite recreation facility, two historical adobes, three swimming pools, and numerous sport fields.

A summary of existing City parks with notable amenities, including locations and acreages is provided in Table 3.13-2. The location of these parks is shown on Figure 3.13-3.

TABLE 3.13-2: EXISTING PARK FACILITIES

PARK	*LOCATION*	*ACREAGE*	*FACILITIES*
Alviso Adobe	Aviso Adobe / Piedmont	2.3	Restrooms, 8 picnic tables, 4 BBQs
Augustus Rathbone Park	Journey/Tradezeon	.75	Playgrounds, picnic area
Ben Rogers Park	Grand Teton / Sequoia	8.7	8 picnic tables, 5 BBQs, backstop, play equipment, parking for 30 vehicles
Bob McGuire Park	Garden	3	Recreation Facility, Tennis Courts, Picnic Areas, Playgrounds, Amphitheater, parking space XX
Calaveras Ridge	Calaveras	1.8	
Calle Oriente Mini-Park	Calle Oriente	0.3	3 picnic tables, 2 BBQs, 2 handball courts, play equipment
Cerano Park	SanDisk / Murphy Ranch	1.0	Restrooms, 4 picnic tables, 2 BBQs, basketball and tennis sport courts, play structure, open grass area, parking for 6 vehicles, adjacent to Coyote Creek Trail
Dixon Landing Park	Dixon Landing / Milmont	11.4	Restrooms, 9 picnic tables, 3 BBQs, basketball, tennis, and volleyball sport courts, play equipment, parking for 84 vehicles
Dog Park at Ed Levin	Calaveras / Spring Valley	1.3	Picnic area, off-leash small and large dog park

PARK	*LOCATION*	*ACREAGE*	*FACILITIES*
Foothill Park	Roswell	4.0	Restrooms, 5 picnic tables, 3 BBQs, play equipment, parking for 20 vehicles
Hall Memorial Park	LaHonda / Coyote	9.9	Restrooms, 3 picnic tables, 1 BBQ, tennis sport court, play equipment, parking for 18 vehicles
Hidden Lake Park	North Milpitas / Escuela	6.6	3 picnic tables, 2 BBQs, lake with ducks, parking for 5 vehicles
Higuera Adobe Park	Wessex / Park Victoria	4.8	Restrooms, 11 picnic tables, 4 BBQs, play equipment, parking for 20 vehicles, adobe building
Hillcrest Park	Fieldcrest / Crescent	5.1	9 picnic tables, 9 BBQs, tot lot
John McDermott Park	Alvarez / Abel	0.9	Restrooms, 3 picnic tables
John Sinnott Park	Clear Lake / Tahoe	4.7	Restrooms, 3 picnic tables, 3 BBQs, volleyball sport court, par course, play equipment, parking for 30 vehicles
Jones Memorial Park	Jacklin / Hillview	4.9	3 picnic tables, 2 BBQs, par course
Leo Murphy Park	Yellowstone	8.3	Restrooms, 6 picnic tables, 3 BBQs, volleyball sport court, play equipment, parking for 18 vehicles
McCandless Park	McCandless Dr.	4	Inclusive Playgrounds, dog park, community garden, soccer field, picnic areas, restrooms
Milpitas Skate Park	Milpitas Sports Center	.5	Plaza Style Skate Park
Milpitas Sports Center	Calaveras	18.5	Pool, gymnasium, sports fields, fitness facilities, etc.
O'Toole Elms Park	Abel / Curtis	1.6	6 picnic tables, 1 BBQ
Parc Metro Center Park	Curtis	0.6	Open grass area, picnic tables, benches
Parc Metro East Park	Curtis	2.0	Restrooms, 6 picnic tables, 6 BBQs
Parc Metro West Park	Curtis	1.0	Benches, play equipment
Pecot Park	Dixon / Conway	3	Adjacent to Hetch Hetchy Trail
Pinewood Park	Lonetree / Starlite	9.9	Restrooms, 10 picnic tables, 3 BBQs, basketball and tennis sport courts, tot lot
Robert E. Browne Park	Yellowstone / South Park Victoria	4.9	4 lighted tennis sport courts, par course
Robert Gill Memorial Park	Paseo Refugio / Santa Rita	8.1	Restrooms, 8 picnic tables, 6 BBQs, basketball, handball, and tennis sport courts, play equipment, parking for 20 vehicles
Sandalwood Park	Escuela / Russell	3.9	3 picnic tables, 3 BBQs, play equipment
Selwyn Park	Selwyn / Dempsey	0.25	2 picnic tables, 2 BBQs, parking for 10 vehicles
Starlite Park	Rudyard / Abbott	3.5	Restrooms, 6 picnic tables, 4 BBQs, horseshoe units, play equipment

PARK	*LOCATION*	*ACREAGE*	*FACILITIES*
Strickroth Park	Martil / Gemma	5.7	2 picnic tables, 2 BBQs, play equipment, parking for 25 vehicles
Strickroth Park		4.9	
Sunnyhills Al Augustine Jr. Memorial Park	Cortez / Coelho	6.2	Restrooms, 10 picnic tables, 8 BBQs, volleyball sport court, play equipment
Tom Cardoza Park	Kennedy / Park Victoria	10.1	Restrooms, 23 picnic tables, 7 BBQs, baseball and volleyball sport court, 2 horseshoe pits, outdoor amphitheater
Tom Creighton Park	Olympic / Park Victoria	5.0	10 picnic tables, 4 BBQs, play equipment, dog play area, PAR equipment
Tom Evatt Park	Abel / Machado	4.4	8 picnic tables, 1 BBQ, basketball, tennis, and volleyball sport courts
Total		***177.8***	

SOURCE: HTTP://WWW.CI.MILPITAS.CA.GOV/MILPITAS/DEPARTMENTS/RECREATION-SERVICES/PARKS/; AND HTTP://WWW.CI.MILPITAS.CA.GOV/MILPITAS/DEPARTMENTS/RECREATION-SERVICES/OUR-FACILITIES/FACILITY-RENTAL/FACILITY-RENTAL-PARKS/PARK-AMENITIES/. ACCESSED JUNE 2016.

The City's 2017 population was approximately 76,057. With 177.8 acres of parkland, the City currently provides approximately 2.33 acres of parkland for every 1,000 people, which falls below their goal of 5.0 park acres per 1,000 population for neighborhood parks.

Joint Use Facilities

Milpitas Unified School District (MUSD) and San Jose Evergreen Community College District (SJECCD) constructed and operate a joint-use 21st century education center at Russell Middle School for the purpose of offering college educational support to the entire Milpitas community. This project was financed by SJECCD and jointly operated by the parties. A Memorandum of Understanding (MOU) was signed by the MUSD and SJECCD boards on November 13, 2012 as a guiding document for the Parties with regard to the development of the Joint Use Center and the potential construction, organizational and operational responsibilities of the Parties.

Additionally, the City has joint-use agreements with the MUSD that allows mutual use of multiple facilities including varying levels of maintenance and operations responsibilities and/or reduced rental rates.

SCHOOLS

The City of Milpitas is served by the Milpitas Unified School District (K-6 elementary schools, 7-8 middle schools, and 9-12 high schools). Table 3.13-3 provides a summary of the public schools serving the city's population.

TABLE 3.13-3: PUBLIC SCHOOLS SERVING MILPITAS

SCHOOL	GRADES SERVED	ADDRESS	ENROLLMENT (2019-2020)
Elementary Schools			
Burnett Elementary	K-6	400 Fanyon Street	556
Curtner Elementary	K-6	275 Redwood Avenue	712
Mattos Elementary	K-6	1750 McCandless Drive	170
Pomeroy Elementary	K-6	1505 Escuela Parkway	711
Randall Elementary	K-6	1300 Edsel Drive	335
Rose Elementary	K-6	250 Roswell Drive	534
Sinnott Elementary	K-6	2025 Yellowstone Avenue	744
Spangler Elementary	K-6	140 N. Abbott Avenue	634
Weller Elementary	K-6	345 Boulder Street	474
Zanker Elementary	K-6	1584 Fallen Leaf Drive	637
Middle Schools			
Rancho Middle	7-8	1915 Yellowstone Avenue	719
Russell Middle	7-8	1500 Escuela Parkway	839
High Schools			
Calaveras Hills High	9-12	1331 E. Calaveras Boulevard	102
Milpitas High	9-12	1285 Escuela Parkway	3,132

SOURCES: MILPITAS UNIFIED SCHOOL DISTRICT, SCHOOLS, HTTP://WWW.MUSD.ORG/SCHOOLS.HTML (ACCESSED JULY 2020) AND MILPITAS UNIFIED SCHOOL DISTRICT, SCHOOL ACCOUNTABILITY REPORT CARDS, HTTP://WWW.MUSD.ORG/SARC-REPORTS.HTML (ACCESSED JULY 2020).

OTHER PUBLIC FACILITIES

Milpitas Public Library

The Milpitas Public Library is the only public library located in the City of Milpitas. The Milpitas Public Library is part of the Santa Clara County Library District system. This enables the relatively small Milpitas Public Library to access all of the other libraries that are part of the Santa Clara County Library system to obtain information not found in the Milpitas Public Library, which has been requested by customers. The Milpitas Public Library is located at 160 N. Main Street. The library is open from 1 PM to 9 PM on Mondays through Wednesdays, 10 AM to 6 PM on Thursdays through Saturday, and on Sundays from noon to 6 PM. The library collection includes materials in both Spanish and English. It also offers a wide variety of media, including DVDs, CDs and audiobooks, as well as a large print collection. The library offers a number of programs for all ages, including storytimes for babies and toddlers. The library, grounds and garage are owned by the City of Milpitas and operated by the SCCLD through agreement between the two agencies.

Milpitas Community Center

The Milpitas Community Center is located at 457 E. Calaveras Boulevard and was built in 1982. The Center is a 24,000 square foot facility that houses a variety of recreation programs including Pre-K Enrichment, Community Theatre, Volunteers, Special Events, Cultural Arts and

many youth and adult classes. In addition, reservations for all Recreation and Community Services rooms, the Jose Higuera Adobe Building, and parks throughout Milpitas can be made in person at the Community Center.

Reservations can be made up to a year in advance by Milpitas residents and up to 6 months in advance by non-residents. Park reservations must be made a minimum of 2 business days in advance. Rooms accommodating 25 to 300 people along with other amenities are also available.

The City of Milpitas offers a variety of art programs at the Community Center. The Milpitas Arts and Culture Grant Program (MACG) is a competitive grant program where both group and individuals can apply for in-kind grants of performance space. The Phantom Art Gallery is located in the Milpitas Community Center and Milpitas Library. Display space is available for artists to display their work, once approved by the Arts Commission. Milpitas Community Theatre is a theatre program for ages 8 to 18. The program contracts a director and supportive staff based on the type of production. This contract program produces three shows throughout the year.

Barbara Lee Senior Center

The Barbara Lee Senior Center is located at 40 North Milpitas Boulevard, adjacent to the Milpitas Community Center. The Senior Center offers many programs and activities, such as classes, trips, socials and a weekday lunch program, which are available to senior citizens 50 years and older.

The facility consists of a community room/auditorium, two game rooms (one for table games and one with pool and ping pong), three classrooms, an art room, an exercise/dance room, and a fitness center. The facility also has a lounge, outside patio area, public computers, and a social services area.

Memberships are good for one year from the date of purchase. Fees are $12 for Milpitas residents (two proofs of residency required) and $30 for non-residents. Membership includes discounts on certain activities and events and supplemental insurance while attending Senior Center programs.

After the Senior Center closes the facility is utilized for Teen programs and activities and general recreation classes. In addition, reservations for all Recreation and Community Services rooms, the Jose Higuera Adobe Building, and parks throughout Milpitas can be made in person at the Senior Center.

Milpitas Sports Center

The Milpitas Sports Center, located at 1325 E. Calaveras Boulevard, is a full service fitness center. The facility includes a 33-piece fitness center, 3 pools, a large gym, 2 aerobic studios, and locker rooms with showers. The Sports Center is equipped with stairmasters, treadmills, crosstrainers, upright bikes, recumbent bikes, free weights, and has certified personal trainers on staff.

Participants in high school may become a member with proof of a valid school I.D. Participants under the age of 18 must be accompanied by a parent/legal guardian for the duration of the program or workout.

In addition, reservations for all Recreation and Community Services rooms, the Jose Higuera Adobe Building, pools, fields, and parks throughout Milpitas can be made in person at the Sports Center.

3.13.2 REGULATORY SETTING

FEDERAL

There are no Federal regulations applicable to the environmental topics of public services and recreation.

STATE AND LOCAL

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment" the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

EMERGENCY RESPONSE/EVACUATION PLANS

The State passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

FIRE PROTECTION

The California Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new existing buildings and premises.

CALIFORNIA FIRE CODE (CFC)

The CFC with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as 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.

Parks and Recreation

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City has adopted park fees as allowed by the Quimby Act, as described in greater detail below.

MILPITAS DEVELOPMENT IMPACT FEE PROGRAM

The City of Milpitas Development Impact Fee Program is outlined in Chapter 4, Fees for New Development, of the Municipal Code. The development impact fees are charged as a condition of development to defray all or a portion of the cost of public facilities and improvements. The cost of developing and administering the City's development impact fee program may be included as a component of the established fees. The revenues raised by payment of each type of development impact fee is placed in a separate and special account and the fees are used to pay for the City's future construction of facilities described in the fee resolution(s), or to reimburse the City for those listed facilities constructed by the City with funds advanced by the City from other sources.

MILPITAS BIKEWAYS MASTER PLAN

The Bikeways Master Plan provides a broad vision, strategies, and actions for the improvements of bicycling in Milpitas. The Plan builds upon the City's previous Bikeways Master Plan from 2002 that the City's Bicycle Pedestrian Advisory Commission produced. The Master Plan categorizes the City's bikeways into three groups: Bike Paths, Bike Lanes, and Bike Routes. The Bikeways Master Plan includes:

- Goals, objectives, and benchmarks for bicycling
- A review of existing bicycling conditions
- Descriptions of Relevant Local and Regional Plans and Polices related to Bicycling
- An analysis of bicycling needs
- Recommended Bicycling Projects, Cost Estimates, and Priorities for implementation
- Recommended Bicycling Programs
- Funding Sources for Bicycle Projects and Programs
- Design Guidelines with best practices for implementing bikeways

MILPITAS TRAILS MASTER PLAN

Adopted in 1997, the Trails Master Plan describes and maps the trail corridors recommended for inclusion in the General Plan. The Master Plan categorizes the City's trails into four groups: Regional Trails, City Trails, Neighborhood Trails, and On-Street Connectors. The Plan also makes several recommendations to facilitate the implementation of the Plan, including: adoption of the Milpitas Trails Master Plan Report, incorporation of the findings into the Circulation Element of the General Plan and associated environmental clearance documents, include top priority trail projects in the Capital Improvement Program, develop a Berryessa Creek Trail funding strategy to identify external grant fund sources, and pursue external grant funds identified in the funding strategy. This plan is currently being updated and expected to be completed in 2021.

SANTA CLARA COUNTY OPEN SPACE AUTHORITY

In 1993, the City of Milpitas incorporated into the Santa Clara County Open Space Authority (SCCOSA), which encompasses all areas within Santa Clara County except those within the jurisdiction of the Mid- Peninsula Open Space District. The SCCOSA has the ability to acquire land and create assessment districts, which in return can fund the acquisition of open space lands. The City of Milpitas may apply for a portion of these funds to help finance City open space projects.

Schools

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations, Chapter 4.9, Payment of Fees, Charges, Dedications, or Other Requirements Against a Development Project. *Section 65995-65998 (h)* The payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 and, if applicable, any amounts specified in Section 65995.5 or 65995.7 are hereby 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 as defined in Section 56021 or 56073, on the provision of adequate school facilities.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by state regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses; and
- Traffic and school bus safety issues.

THE KINDERGARTEN-UNIVERSITY PUBLIC EDUCATION FACILITIES BOND ACT OF 2002 (PROP 47)

This act was approved by California voters in November 2002 and provides for a bond issue of $13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This

comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A", reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for state construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- Level I fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.

- Level II fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

- Level III fees are outlined in Government Code Section 655995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of state funding.

3.13.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on public services and recreation if it would result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire Protection;
    - Police Protection;
    - Schools;
    - Parks; and
    - Other public facilities.
- An increase in 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; or
- If it includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: General Plan implementation could result in adverse physical impacts on the environment associated with the need for new governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts and the provision of public services (Less than Significant)

Development accommodated under the General Plan would result in additional residents and businesses in the City, including new residential, industrial, office, and commercial uses. As described in Chapter 2.0, buildout of the General Plan could yield a total of up to 33,401 housing units, a population of 113,530 people, 47,807,536 square feet of non-residential building square footage, and 84,333 jobs within the Planning Area. As shown in Table 2.0-3 of Chapter 2.0, this represents development growth over existing conditions of up to 11,186 new housing units, 37,473 people, 19,729,648 square feet of new non-residential building square footage and 36,795 jobs.

Development and growth facilitated by the General Plan would result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. The General Plan includes policies and actions to ensure that public services are provided at acceptable levels and that the City will maintain and implement public facility master

plans, in collaboration with appropriate outside service providers and other agencies, to ensure compliance with appropriate regional, state, and federal laws and to provide efficient public facilities and services to Milpitas.

As the demand for services increases, there will likely be a need to address acceptable service ratios, response times, and other performance standards. New or expanded service structures (e.g., offices, maintenance and administrative buildings, schools, parks, fire facilities, libraries, etc.) will be needed to provide for adequate staffing, equipment, and appropriate facilities to serve growth in the city. Existing facilities may be expanded at their current location. New facilities may also be constructed. The Public Facilities (PF) land use designations would accommodate the majority of new public facilities necessary to provide community services. There would likely be environmental impacts associated with the construction or expansion of the facilities needed to provide public services.

The General Plan does not propose or approve actual development projects, or the physical expansion of public facilities. As future development and infrastructure projects (including new governmental facilities) are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Such development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Any future expansion of public facilities required by growth in the City would be required to be reviewed for site-specific impacts.

As previously stated, new facilities will be needed to serve growth contemplated in the General Plan. The environmental effect of providing the public services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the governmental facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. These impacts are described in the relevant chapters (Chapters 3.1 through 3.16, and 4.0) of this Draft EIR. Any future development under the General Plan would be required to comply with regulations, policies, and standards included in the General Plan, and would be subject to CEQA review as appropriate.

The General Plan includes a range of policies and actions (listed below) to ensure that public services adequately accommodate growth, maintain community services and facilities, and that new development funds its fair share of services. Therefore, impacts related to the provisions and need for public facilities are **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA 4-1: Provide adequate funding for police and fire facilities and personnel to accommodate existing and future citizens' needs to ensure a safe and secure environment for people and property throughout the city.

Policy SA 4-2: Continue to support community-based crime prevention. Support existing programs and encourage expanded or new programs that focus on youth crime prevention, anti-gang programs, or other community programs that reduce crime throughout the city.

Policy SA 4-3: Cooperate with neighboring cities, Santa Clara County, and regional agencies as necessary to address crime issues that cross jurisdictional boundaries.

Policy SA 4-4: Emphasize the use of physical site planning as an effective means of enhancing safety and preventing crime.

Policy SA 4-5: Encourage private business owners to install security cameras and other available technology to reduce property crimes. Business owners are encouraged to share relevant video and surveillance information with the Police Department in order to assist with investigations and crime prevention efforts.

Policy SA 4-6: Coordinate with VTA security and BART Police, to address emerging safety concerns near BART, and VTA facilities in Milpitas.

Policy SA 4-7: Continue to promote publicly accessible crime reporting and crime mapping data.

Policy SA 4-8: Continue to work cooperatively with state, regional, and local public agencies with responsibility for fire protection in hillside areas.

Policy SA 4-9: Ensure that fire and emergency medical services meet existing and future demand by maintaining a response time of four minutes or less for all urban service areas.

Policy SA 4-10: Ensure that adequate water supplies are available for fire-suppression throughout the city. Require development to construct and fund all fire suppression infrastructure equipment needed to provide adequate fire protection services to new development.

Policy SA 4-11: Promote community safety through education by supporting and leading community events including National Night Out, neighborhood watch programs, increased community training opportunities, and expanding emergency preparedness outreach and opportunities to traditionally underserved/underrepresented areas and communities within the city.

SAFETY ELEMENT ACTIONS

Action SA 4a: As part of the development review process, consult with the Police Department in order to ensure that the project facilitates adequate police services and crime prevention measures. The use of physical site planning as an effective means of preventing crime, including lighting, visibility,

and video surveillance requirements shall be determined by the Police Department, where applicable.

Action SA 4b: As part of the development review process require applications to be reviewed by the Public Works Department and Fire Department in order to ensure that development projects facilitate adequate fire services, access, and fire prevention measures.

Action SA 4c: Conduct periodic Police and Fire Department evaluations that analyze response times and other incident data to ensure adequate services are provided throughout the city.

Action SA 4d: When reviewing development applications, consider the use of technology as a means of crime reduction. i.e. video surveillance requirements for new structures.

Action SA 4e: Periodically review crime data for emerging trends in citywide crime, and continue to adapt to a changing crime environment as necessary to maintain community safety.

Action A 4f: Assign staff responsibility, through either the Police Department and/or the Parks and Recreation Department, to lead community outreach efforts in traditionally underserved areas of Milpitas. Such efforts may include but are not limited to:

- *Assistance with the establishment of Neighborhood Watch programs*
- *Hosting National Night Out events*
- *Connecting residents to multi-lingual emergency training and preparedness programs*

UTILITIES AND PUBLIC SERVICES POLICES AND ACTIONS

UCS 1-5: Require the payment of impact fees for all new development.

Action UCS-8a: Maintain a close, collaborative relationship with the local school districts to ensure the adequate provision of school and related facilities to serve existing and future development. The City should work with the local school districts to develop criteria for the designation of school sites, identify locations for new school sites, and consider a range of opportunities available to the City reduce the cost of land for school facilities. Such opportunities may include, but are not limited to, designating lands as School (SCH) on the General Plan Land Use map when future school sites are identified. The City shall encourage the local school districts to comply with City standards in the design and landscaping of school facilities.

Action UCS-8c: Require new development to pay applicable school facility impact fees and work with developers and the school districts to ensure that adequate school and related facilities will be available.

Impact 3.13-2: General Plan implementation may result in adverse physical impacts associated with the deterioration of existing parks and recreation facilities or the construction of new parks and recreation facilities (Less than Significant)

Growth accommodated under the General Plan would include a range of uses that could increase the population of the City and also attract additional workers and tourists to the City. Such growth would result in increased demand for parks and recreation facilities. It is anticipated that over the life of the General Plan, use of parks, trails, and recreation facilities would increase, due to new residents and businesses. The additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have environmental impacts, although the exact impacts cannot be determined since the potential improvements are unknown.

The provision of new parks and recreation facilities would reduce the potential for adverse impacts and physical deterioration of existing parks and recreation facilities, by providing additional facilities to accommodate the demand for parks and recreation facilities. These new facilities would be provided at a pace and in locations appropriate to serve new development, as required to maintain the City adopted standard for park space acreage at five acres for every 1,000 residents (as required by General Plan Policy PROS-1.4). Development under the General Plan would indirectly lead to the construction of new parks and recreation facilities to serve new growth and to meet existing parks and recreation needs. The General Plan supports the creation of new parks and recreation facilities, including new parks and trails, to accommodate a wide range of activities for all age groups. These new parks and recreation facilities would be spread throughout areas proximate to new development in and around existing neighborhoods. Neighborhood and community parks and trails would generally be accommodated in the Permanent Open Space and Public Facilities Land use designations.

General Plan Policy PROS-1.4 establishes a citywide ratio outside of Specific Plan Areas of five acres of parkland per 1,000 residents. For areas within a Specific Plan, require land dedication or in-lieu fees equivalent to the park land standard established in the relevant Specific Plan, allowing credit for private recreation space for up to 1.5 acres/1,000 residents for private recreation space. The City currently provides approximately 2.33 of parkland for every 1,000 people. The deficit in park land is currently being offset with the recreational opportunities available in private parks and other nearby regional parks.

As shown in the Project Description (Table 2.0-3), the projected total buildout population (which includes existing plus projected population growth) is 113,530 people would result in a demand for additional developed parkland.

The proposed General Plan does not specifically propose any development projects, including parks. As a result, site-specific physical impacts of future park development and construction cannot be determined until future projects are brought forward for review. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General

Plan, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

In addition to ensuring that new and expanded parks and recreation facilities are provided to accommodate new growth, the General Plan includes policies and actions to ensure that parks and recreation facilities are adequately maintained and improved to serve both existing and planned growth.

The proposed General Plan does not propose or approve any development nor does it designate specific sites for new or expanded parks and recreational facilities. The General Plan includes a range of policies and actions (listed below) to ensure that parks and recreational facilities are adequately funded, and that new development funds its fair share of services needed to meet General Plan objectives. New development is required to participate in the provision and expansion of public services, recreational amenities, and facilities, and is also required to demonstrate that the City's public services and facilities can accommodate the increased demand for said services and facilities associated with future projects during the entitlement process.

The proposed General Plan does not propose or approve the construction or expansion of parks or recreational facilities. Any new parks or recreational facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the parks and recreational facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. These impacts are described in the relevant chapters (Chapters 3.1 through 3.16, and 4.0) of this Draft EIR. Any future development under the General Plan would be required to comply with regulations, policies, and standards included in the General Plan, and would be subject to CEQA review as appropriate.

Therefore, impacts related to the provisions and need for park and recreational facilities are **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

PARKS, RECREATION & OPEN SPACE POLICIES

Policy PROS 1-1: Provide a park and recreation system that is equitably distributed, safe, accessible, and designed to serve the needs of all residents of the community.

Policy PROS 1-2: Develop and maintain a high-quality system of parks, trails, and recreation facilities to create diverse opportunities for passive and organized recreation.

Policy PROS 1-3: Achieve and maintain a minimum overall citywide ratio of 5 acres of park land for every 1,000 residents outside of the Midtown Specific Plan Area and Transit Area Specific Plan Area. Within these Specific Plan Areas, achieve and maintain the parks standards and ratios specified in the specific plan, with an emphasis on publicly-accessible spaces and facilities.

Policy PROS 1-4: Park land acreage dedications and/or equivalent in-lieu fees shall be required for new development in accordance with the following standards:

- *For areas outside of a Specific Plan, require land dedication or in lieu fees equivalent to the 5 acre/1,000 resident standard, but allow credit for private recreation space for up to 2 acres/1,000 residents for private open space. Private recreation credit will be given at the discretion of the City and pursuant to the criteria specified in the City's Subdivision Regulations (Title XI, Chapter 1, Section 9.08 of the Milpitas Municipal Code).*

- *For areas within a Specific Plan, require land dedication or in-lieu fees equivalent to the park land standard established in the relevant Specific Plan, allowing credit for private recreation space for up to 1.5 acres/1,000 residents for private recreation space. Private recreation credit will be given at the discretion of the City and pursuant to the criteria specified in the City's Subdivision Regulations (Title XI, Chapter 1, Section 9.08 of the Milpitas Municipal Code).*

Policy PROS 1-5: Encourage the provision and dedication of parkland within future development projects, rather than the payment of in-lieu fees, in order to ensure that the City maintains an extensive network of neighborhood parks that serve all areas of the community.

Policy PROS 1-6: Encourage private owners to permit public access to all private parks, trails, and recreation facilities to the greatest extent feasible.

Policy PROS 1-7: Design parks to enhance public safety by providing visibility of all areas both to and from the street, adequate lighting, and access for public safety responders.

Policy PROS 1-8: Expand, renovate, and maintain high quality recreation facilities, programs, and services to accommodate existing and future needs; encourage traditional and non-traditional recreation; and support active and passive recreation, wellness, historic assets, cultural arts, environmental education, conservation, accessibility, inclusion, diversity, safety, and new technology that equitably serves the most vulnerable populations of the community.

Policy PROS 1-9: Prioritize funding and City resources to improve the condition, maintenance, and upkeep of existing City parks and recreational facilities.

Policy PROS 1-10: Require publicly-accessible parks and recreational facilities that are owned and operated by homeowner's associates (HOAs) and special assessment districts to be maintained in a safe and aesthetically-pleasing manner.

Policy PROS 1-11: Pursue opportunities for cooperation and partnerships with other agencies to develop and enhance publicly-accessible trails and linear parks along local drainages, creeks, and utility corridors.

Policy PROS 1-12: Encourage and support the expansion of an integrated trail network that connects users to neighboring local and regional trail systems and to community amenities such as schools,

open space areas, park and recreation facilities, commercial and job centers and residential areas to encourage both recreational and utilitarian travel.

Policy PROS 1-13: Require new development to provide direct pedestrian connections, such as sidewalks, trails, wayfinding measures and other rights-of-way and infrastructure improvements to the existing and planned network of parks and trails wherever feasible.

Policy PROS 1-14: Further expand public access to a variety of park and recreational facilities through the pursuit of joint use agreements with entities and organizations that control existing non-city owned open space lands, such as public and private schools, Santa Clara Valley Water District, Santa Clara County and other public agencies, private entities and businesses and nonprofit groups.

Policy PROS 1-15: Design and maintain park and recreation facilities to minimize water, energy and chemical (e.g., pesticides and fertilizer) use. Incorporate the use of recycled water, native and/or drought-resistant vegetation and ground cover where appropriate. Pursue opportunities for multi-beneficial park developments that incorporate flood control facilities, stormwater management and groundwater recharge areas.

Policy PROS 1-16: Recognize the importance of regional facilities and continue to foster relationships with Santa Clara County, the San Francisco Bay Trail, and neighboring jurisdictions to identify opportunities for additional trail connections.

PARKS, RECREATION & OPEN SPACE ACTIONS

Action PROS 1a: Continue to monitor the condition of parks, trails, and recreation facilities throughout the community and prioritize the rehabilitation of existing facilities that are in the greatest need and that serve the greatest number of residents. When planning or significantly renovating park and recreation facilities, implement a park "Master Planning" process which includes public consultation and outreach, with an emphasis on outreach to the broad and diverse segments of the Milpitas population.

Action PROS 1b: Periodically review, and update if necessary, the City's Park and Recreational Facilities Impact Fees in order to ensure that new development continues to provide a fair-share contribution towards parks, trails, and recreation facilities.

Action PROS 1c: Update the Parks and Recreation Master Plan to include and address:

- *Needs for additional parks and sports fields to accommodate projected growth under the General Plan*
- *Need for and feasibility of a youth or teen center*
- *Need for and feasibility of a large-scale community park*
- *Updated asset and amenity analysis and prioritization for park facility upgrades and maintenance*

- *Activity upgrades and needs analysis for additional recreational assets and amenities including: sports fields (baseball, soccer, and cricket), and amphitheaters, to serve emerging activity trends and needs within the community, as well as analysis of the quality of the assets currently owned and maintained by the city.*

- *Future updates to the Parks and Recreation Master Plan shall emphasize and prioritize public participation and workshops that enable close collaboration with a variety of members of the community in the design, and programming, of parks and recreation facilities to ensure that these facilities meet the diverse needs of all segments of the community, regardless of age, ethnicity, income, and activity level.*

Action PROS 1d: Investigate and pursue a diverse range of funding opportunities for parks, trails, and recreation facilities, including but not limited to grants, joint use/management strategies, user fees, private sector funding, assessment districts, homeowners' associations, non-profit organizations, funding mechanisms for the maintenance of older parks, and management assistance through Federal, State, and regional partnerships.

Action PROS 1e: Develop and maintain a comprehensive Parks and Landscape Standard Plans and Specifications document for parks, trails, and recreation facilities. The Parks and Landscape Standard Plans and Specifications document should address, at a minimum, the following:

- *Facility size and service area;*
- *Location;*
- *Site characteristics;*
- *Basic design elements;*
- *Optional design elements;*
- *Accessibility standards;*
- *Detailed furniture, fixtures, and equipment (FF&E) lists for items such as trash cans, benches, BBQ pits, etc., in order to provide consistency, uniformity, and cost effective maintenance and replacement;*
- *Utility and infrastructure requirements; and*
- *Maintenance requirements.*

Development standards shall be included for all types of parks, trails, and recreation facilities, including neighborhood parks, community parks, sports parks, special use parks, trails, natural open space, and detention basins managed by the City. These standards shall also apply to privately-owned parks and open space land for which credit was received towards a project's park land dedication requirements.

Action PROS 1f: Coordinate with the Santa Clara County Parks and Recreation Department on active and passive issues and opportunities related to Ed Levin Park. Pursue joint use and maintenance agreements where feasible to address issues and opportunities to preserve and enhance the recreational value of the park for all area residents.

Action PROS 1g: Pursue opportunities to cooperate with the Santa Clara Valley Water District and the San Francisco Public Utilities Commission to develop and enhance trails, linear parks and related infrastructure along local water drainages, creek, and utility corridors. "Related infrastructure" includes, but is not limited to, lighting, signage, benches, water fountains, and restrooms, where applicable.

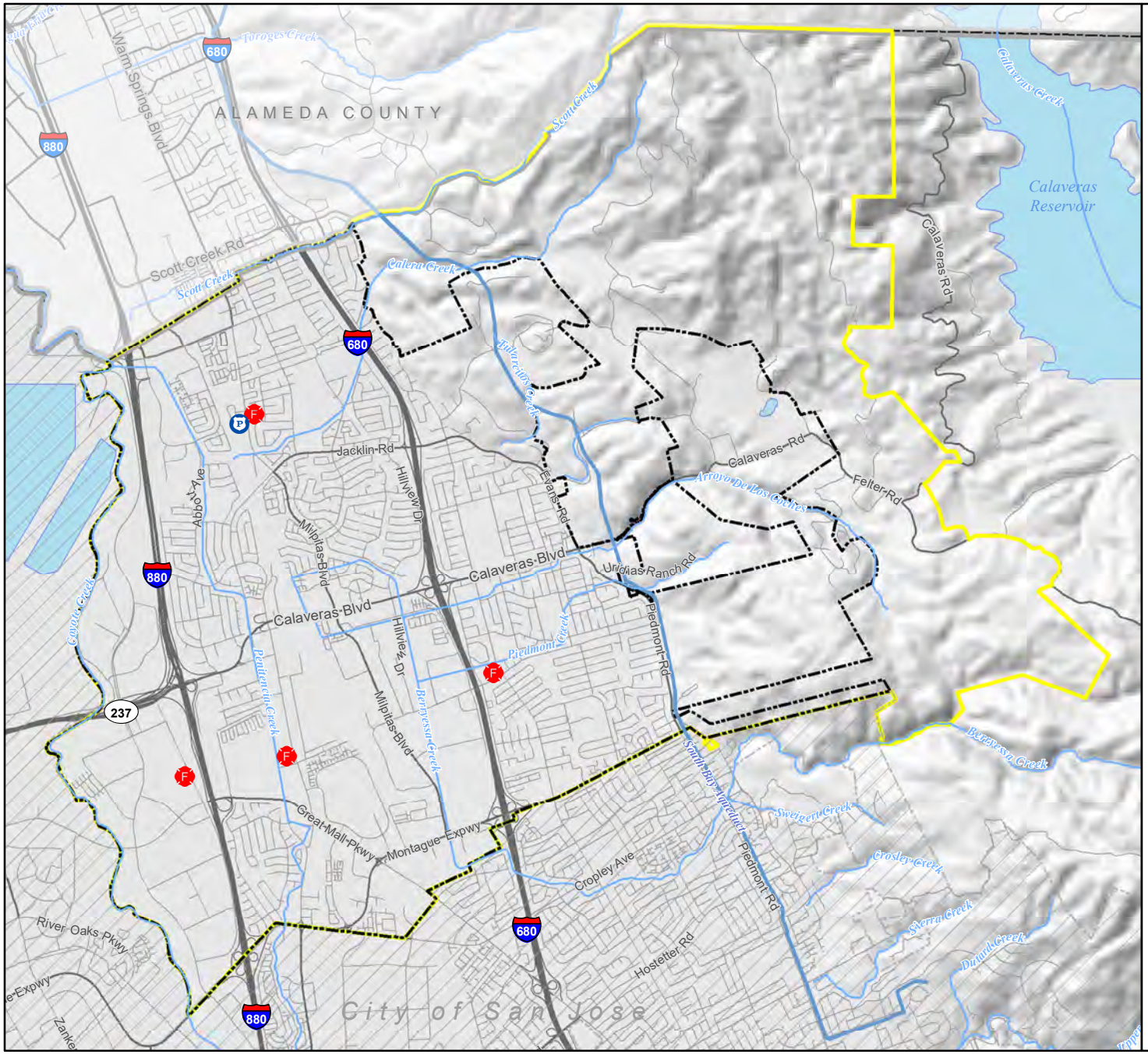
Action PROS 1h: Implement recommendations in the Bikeway Master Plan that safely link trails and open space to neighborhoods and special areas and regional trail networks.

Action PROS 1i: Update the Trails Master Plan to identify trail new trail opportunities and trail connections throughout the community. Updates should include:

- *Analysis and quantification of which facilities are currently utilized to higher degrees than others, so that targeted improvements may be developed in order to benefit the greatest number of users.*
- *Strategies to provide increased west-east pedestrian and bicycle trail development*
- *Opportunities for additional access across major transportation facilities (Interstate 880, and 680) throughout the city with special focus on opportunities for linking cross-freeway trail development to schools, parks, and open space areas.*
- *Opportunities to increase bike and pedestrian safety through the use of trails and dedicated paths throughout the city, including better connectivity to local parks, and schools. Such strategies should include the establishment of a Safe Routes to School (SRTS) network, and incorporation of "Vision Zero" mobility concepts.*

Action PROS 1j: Implement the policies and actions in the Circulation Element that facilitate and promote safe, increased walkability, bicycle use, and connectivity between parks and trail systems, with a focus on areas currently not well connected or lacking basic infrastructure.

Action PROS 1k: During subsequent updates to key Specific Plans within Milpitas, such as the Transit Area Specific Plan (TASP) and Midtown Specific Plan, review established park standards and explore opportunities to increase requirements for publicly-accessible parks and recreation facilities within these Plan Areas to more closely match the adopted City-wide standard of 5 acres per 1,000 residents.



CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.13-1.
Police and Fire Facilities

Police and Fire Stations

- Fire Station
- Police Station

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

0 ¼ ½
Miles
1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal-Atlas; Map date: September 9, 2016.

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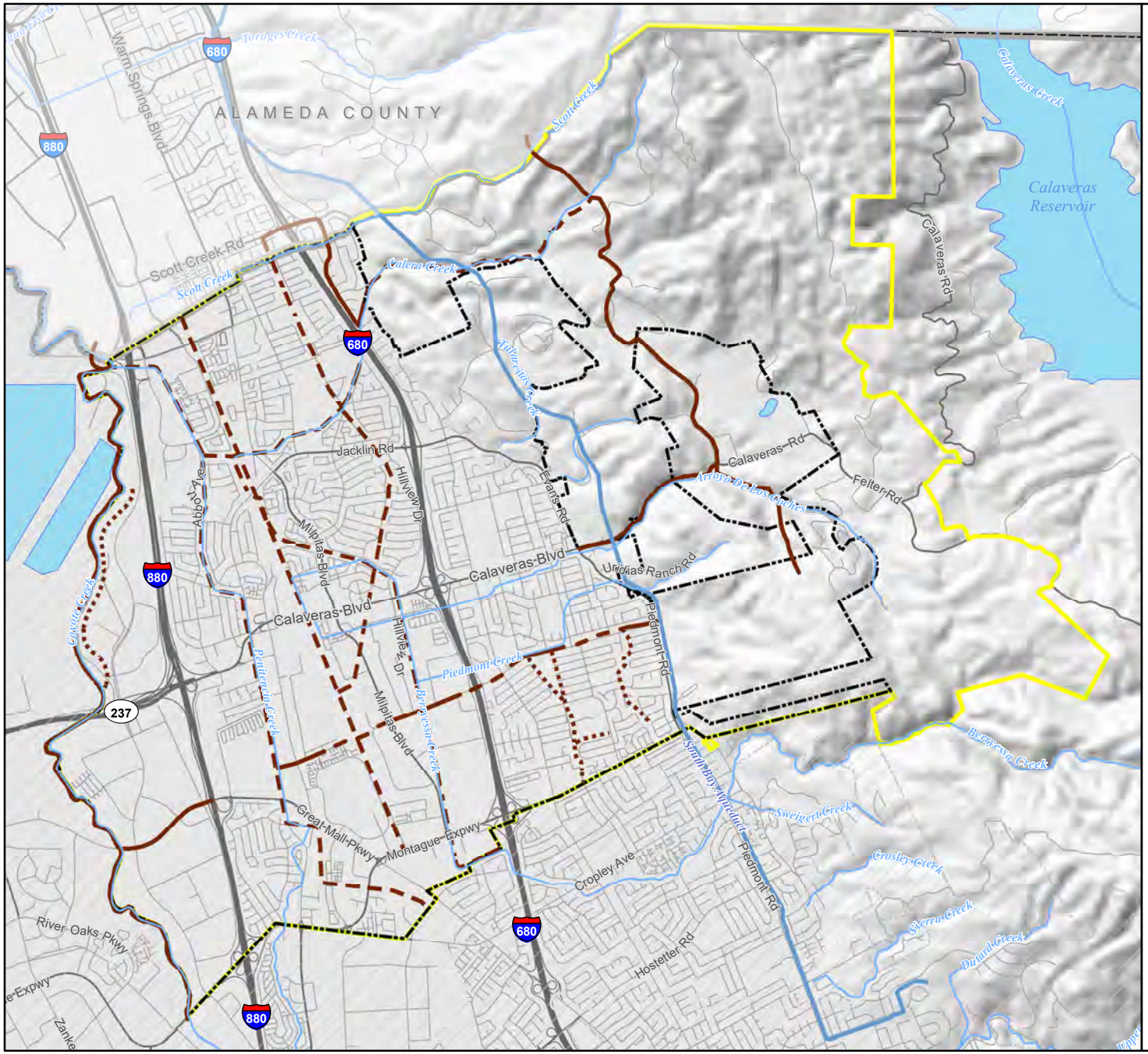

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.13-2. Trail System

Trails

- City Trail
- Neighborhood Trail
- Regional Trail

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

N

0 ¼ ½

Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atlas; Milpitas Trails Master Plan, Figure 1. Map date: June 29, 2016.

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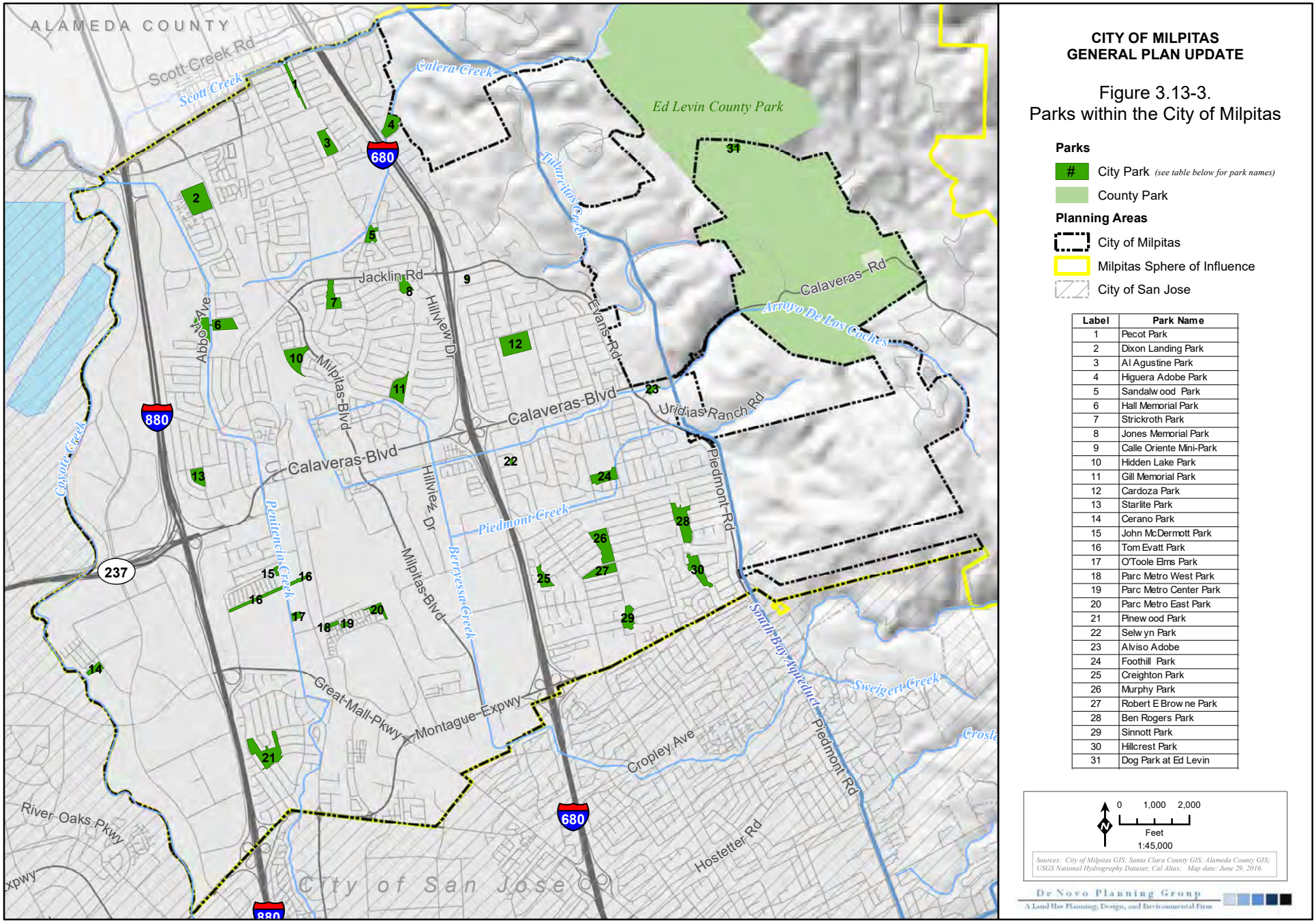

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.13-3.
Parks within the City of Milpitas

Parks

- # City Park *(see table below for park names)*
- County Park

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- City of San Jose

Label	Park Name
1	Pecot Park
2	Dixon Landing Park
3	Al Agustine Park
4	Higuera Adobe Park
5	Sandalwood Park
6	Hall Memorial Park
7	Strickroth Park
8	Jones Memorial Park
9	Calle Oriente Mini-Park
10	Hidden Lake Park
11	Gill Memorial Park
12	Cardoza Park
13	Starlite Park
14	Cerano Park
15	John McDermott Park
16	Tom Evatt Park
17	O'Toole Elms Park
18	Parc Metro West Park
19	Parc Metro Center Park
20	Parc Metro East Park
21	Pinewood Park
22	Selwyn Park
23	Alviso Adobe
24	Foothill Park
25	Creighton Park
26	Murphy Park
27	Robert E Browne Park
28	Ben Rogers Park
29	Sinnott Park
30	Hillcrest Park
31	Dog Park at Ed Levin

0 1,000 2,000
Feet
1:45,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; Cal Atlas; Map date: June 29, 2016.

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This chapter describes the potential impacts to the transportation system associated with adoption and implementation of the General Plan. The impact analysis examines the roadway, transit, bicycle, and pedestrian components of the City's transportation system. To provide a context for the impact analysis, this chapter begins with the environmental setting, which is a description of the existing physical and operational conditions for the transportation system. Following the setting is the regulatory framework influencing the transportation system and providing the basis for impact significance thresholds used in the impact analysis. The chapter concludes with the impact analysis findings and recommended mitigation measures. This section was prepared by W-Trans, with traffic modeling support from Kittelson & Associates and the Valley Transportation Authority.

Under SB 743 as of July 1, 2020, local agencies may no longer rely on roadway/intersection delay and capacity-based analyses for CEQA purposes, but rather, agencies must analyze transportation impacts utilizing vehicle miles travelled ("VMT"), which measures the number of vehicle trips generated by a project and the average distance of travel to and from the project. These are calculated and assessed on a per rate basis – per capita for residential projects or per employee for commercial projects. This is a change from the prior method of analyzing transportation impacts, which measured levels of service ("LOS") at intersections and roadway segments, graded from LOS A to LOS F. While LOS is no longer the threshold to measure transportation impacts, it may be relevant to goals and policies in a local agency's General Plan. State Congestion Management Program requirements still call for the use of vehicular LOS in monitoring the performance of key transportation facilities and in analyzing transportation impacts of proposed land use developments, in urbanized counties that have a CMP. VTA, as the Congestion Management Agency (CMA), maintains the CMP for Santa Clara County in partnership with its 16 Member Agencies. SB 743 amends CMP law to reinstate the ability of cities and counties to designate "Infill Opportunity Zones" where the CMP LOS standard would not apply (65088.4). These zones may be established in Transit Priority Areas or high-quality transit corridors with 15-minute or better service frequencies. SB 743 does not preclude local agencies from applying LOS in General Plan policies, zoning codes, conditions of approval, or any other planning requirements pursuant to the police power or other authority. In other words, local agencies can retain LOS for a number of purposes, including transportation impact analysis studies, but cannot apply it to CEQA analysis. Many Member Agencies have previously established LOS thresholds for local facilities and expect to continue to analyze LOS for local purposes even with the implementation of SB 743.

Comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic from the California Department of Transportation (Caltrans). Each of the comments related to this topic are addressed within this section. Full comments received are included in Appendix A.

3.14.1 ENVIRONMENTAL SETTING

The existing physical and operational conditions for Milpitas' transportation system are based on review of local and regional transportation plans, as well as physical review of the existing transportation system, as described below. Descriptions are organized by transportation system

component beginning with the roadway network, followed by the pedestrian and bicycle network and transit system.

EXISTING ROADWAY NETWORK

The roadway system in Milpitas consists of federal highways, state highways, county expressways, and local arterial roadways. This section describes the physical characteristics of Milpitas's roadway network.

Federal Highways

Two federal highways operated and maintained by Caltrans pass through Milpitas including Interstates 680 and 880.

I-680 is a primary route connecting the City of San Jose to I-80 through Milpitas, Dublin, Walnut Creek, and Fairfield. I-680 is fully grade separated with at least three lanes per direction through Milpitas. A high-occupancy toll lane is present in the southbound direction for most of I-680 in Milpitas.

I-880 is a primary route connecting the City of San Jose to I-80 through Milpitas, Fremont, Hayward, and Oakland. I-880 is fully grade separated with at least four lanes (one high-occupancy vehicle and three general purpose) per direction through Milpitas.

State Highways

One state highway operated and maintained by Caltrans passes through Milpitas.

SR 237 is at State Highway running through Milpitas that connects I-680 to I-880 then continues to U.S. 101 in Mountain View. SR 237 between I-680 and I-880 is a six-lane arterial street (East Calaveras Boulevard) which transitions into a fully grade separated highway west of I-880. Arterial sections of SR 237 within the City of Milpitas include:

> **Calaveras Boulevard** is designated as an arterial by the City of Milpitas. It connects I-680 to I-880 and is the major east-west route in the city.

County Expressways

One expressway operated and maintained by Santa Clara County passes through Milpitas.

Montague Expressway is a major east-west route in Santa Clara County that connects US-101 and the San Tomas Expressway in San Jose to McCarthy Boulevard, I-880, Great Mall Parkway/East Capitol Avenue, and I-680 in Milpitas. Montague Expressway turns into Landess Road east of I-680. Existing daily traffic on the expressway averages 40,000 vehicles per day based on 2016 daily traffic counts.

Local Arterial Streets

Abel Street is an arterial that connects North Milpitas Avenue, West Calaveras Boulevard/SR-237, the Great Mall Parkway, and South Main Street. It turns into Jacklin Road east of North Milpitas

Avenue. Existing daily traffic on the street averages 22,000 vehicles per day based on 2016 daily traffic counts.

Dixon Landing Road is an arterial in northern Milpitas that connects North McCarthy Boulevard and I-880 to North Milpitas Boulevard and the surrounding neighborhoods. Existing daily traffic on the street averages 36,000 vehicles per day based on 2016 daily traffic counts.

East Capitol Avenue is an arterial in southern Milpitas between the Montague Expressway and Milpitas-San Jose city limit. It turns into the Great Mall Parkway west of the Montague Expressway, and into North Capitol Avenue east of the City Limits.

East Tasman Drive is an arterial that extends west from I-880 and connects with McCarthy Road before entering San Jose and continuing through Santa Clara and Sunnyvale. It becomes the Great Mall Parkway east of I-880. Existing daily traffic on the arterial averages 38,000 vehicles per day based on 2016 daily traffic counts.

Great Mall Parkway is a major east-west arterial that connects I-880 to South Abel Street, South Main Street, the Montague Expressway, and the Great Mall. It turns into East Tasman Drive west of I-880, and into East Capitol Avenue east of the Montague Expressway. Existing daily traffic on the parkway averages 32,000 vehicles per day based on 2016 daily traffic counts.

Jacklin Road is an arterial that connects I-680 to North Park Victoria Drive, Escuela Parkway, and North Milpitas Boulevard. It turns into North Abel Street west of North Milpitas Boulevard.

McCarthy Boulevard is an arterial on the west side of the city that roughly parallels I-880. It connects Montague Expressway to East Tasman Avenue/Great Mall Parkway, West Calaveras/SR-237, and Dixon Landing Road. Existing daily traffic on the boulevard averages 35,000 vehicles per day based on 2016 traffic counts.

Milpitas Boulevard is a north-south arterial bisecting the city parallel to both I-880 and I-680. It connects the Montague Expressway to Yosemite Drive, East Calaveras Street/SR-237, Escuela Parkway, Jacklin Road, and Dixon Landing. Existing daily traffic on the boulevard averages 20,000 vehicles per day based on 2016 daily traffic counts.

Park Victoria Drive parallels I-680 and is a north-south arterial between Landess Road and Jacklin Road, and a collector north of Jacklin Road. Existing daily traffic on the street averages 10,000 vehicles per day based on 2016 daily traffic counts.

Local Collector Streets

Escuela Parkway is a collector roadway that connects Jacklin Road and North Milpitas Boulevard through several neighborhoods.

Landess Road is a collector roadway that connects I-680 to South Park Victoria Road and Piedmont Road. It turns into the Montague Expressway west of I-680.

Piedmont Road is a collector roadway on the eastern edge of Milpitas that connects Landess Avenue to East Calaveras Drive.

Serra Way is a short collector roadway in the historic commercial area that connects West Calaveras Boulevard to South Abel Street and South Main Street.

South Main Street is a collector roadway from Serra Road, in the historic commercial area, to South Abel Road just past the Great Mall Parkway. At South Abel Street, it turns into an arterial roadway and connects to Montague Expressway. Existing daily traffic on the street averages 20,000 vehicles per day based on 2016 24-hour traffic counts.

Trade Zone Boulevard is a collector roadway on the southern border of Milpitas that connects Montague Expressway to North Capitol Avenue in San Jose.

Yosemite Drive is an east-west collector that connects I-680 to South Milpitas Boulevard, South Park Victoria Drive, and Piedmont Road.

Study Roadway Segments

The following 32 study roadway segments were identified as those most crucial to Milpitas' local circulation system and its connectivity to the regional transportation network. The locations of the study segments were shown in Figure 3.14-1.

1. N. Milpitas Boulevard southbound south of Dixon Landing Road
2. N. Milpitas Boulevard northbound south of Dixon Landing Road
3. N. Abel Street southbound west of N. Milpitas Boulevard
4. N. Abel Street northbound west of N. Milpitas Boulevard
5. McCarthy Boulevard northbound south of SR 237
6. McCarthy Boulevard southbound south of SR 237
7. Great Mall Parkway westbound west of Montague Expressway
8. Great Mall Parkway eastbound west of Montague Expressway
9. Montague Expressway westbound west of Great Mall Parkway
10. Montague Expressway eastbound west of Great Mall Parkway
11. SR 237/East Calaveras Boulevard westbound east of North Main Street
12. SR 237/East Calaveras Boulevard eastbound east of North Main Street
13. I-880 northbound between SR 237 and Dixon Landing Road
14. I-880 southbound between Dixon Landing Road and SR 237
15. I-880 northbound between Tasman Drive-Great Mall Parkway and SR 237
16. I-880 southbound between SR 237 and Tasman Drive-Great Mall Parkway
17. I-880 northbound between Montague Expressway and Tasman Drive-Great Mall Parkway
18. I-880 southbound between Tasman Drive-Great Mall Parkway and Montague Expressway
19. I-680 northbound between SR 237 and Jacklin Road
20. I-680 southbound between Jacklin Road and SR 237

21. I-680 northbound between Montague Expressway and SR 237
22. I-680 southbound between SR 237 and Montague Expressway
23. S. Milpitas Blvd northbound north of Montague Expressway
24. S. Milpitas Blvd southbound north of Montague Expressway
25. Dixon Landing Road eastbound between I880 and Milmont Drive
26. Dixon Landing Road westbound between I880 and Milmont Drive
27. Tasman Drive eastbound between Alder Drive and I880 SB ramps
28. Tasman Drive westbound between Alder Drive and I880 SB ramps
29. S. Main Street northbound north of Montague Expressway
30. S. Main Street southbound north of Montague Expressway
31. S. Park Victoria Drive southbound south of Calaveras Blvd
32. S. Park Victoria Drove northbound south of Calaveras Blvd

Study Intersections

The following 37 study intersections were identified as those most crucial to Milpitas' local circulation system and its connectivity to the regional transportation network. The locations of the study intersections are show in Figure 3.14-2.

1. Dixon Landing Road/I-880 Southbound Ramp
2. Dixon Landing Road/I-880 Northbound Ramps
3. California Circle/I-880 Northbound Ramps
4. Dixon Landing Road and Milmont Drive
5. North Milpitas Boulevard/Dixon Landing Road
6. North Milpitas Boulevard/Jacklin Road-North Abel Street
7. Hillview Drive and Jacklin Road
8. I-680 Southbound Ramps/Jacklin Road
9. I-680 Northbound Ramps/Jacklin Road
10. North McCarthy Boulevard/Ranch Drive South
11. McCarthy Boulevard/SR 237 Westbound Ramp
12. McCarthy Boulevard/SR 237 Eastbound Ramp
13. McCarthy Boulevard/Technology Drive-Bellew Drive
14. SR 237 – West Calaveras Blvd/I-880 Southbound Ramps
15. I-880 Northbound Ramp/West Calaveras Boulevard
16. South Abbott Street/West Calaveras Boulevard
17. Serra Way/West Calaveras Boulevard
18. Abel Street/West Calaveras Boulevard
19. North Milpitas Boulevard/East Calaveras Boulevard
20. East Calaveras Blvd/Hillview Drive
21. East Calaveras Blvd/Park Victoria Drive
22. McCarthy Boulevard/Alder Drive

23. McCarthy Boulevard/East Tasman Drive
24. Alder Drive/East Tasman Drive
25. East Tasman Drive/I-880 Southbound Ramp
26. I-880 Northbound Ramp – Thompson Street/Great Mall Parkway
27. South Abel Street/Great Mall Parkway
28. South Main Street/Great Mall Parkway
29. South Main Street/South Abel Street
30. Great Mall Drive/Great Mall Parkway
31. Great Mall Parkway/Centre Pointe Drive
32. Montague Expressway/Great Mall Parkway – East Capitol Avenue
33. South Milpitas Boulevard/Montague Expressway
34. I-680 Northbound Ramp/Dempsey Road – Landess Avenue
35. McCarthy Boulevard – O'Toole Avenue/Montague Expressway
36. South Main Street – Oakland Road/Montague Expressway
37. Montague Expressway/Trade Zone Boulevard – McCandless Drive

Dixon Landing Road/Southbound I-880 Off-Ramp is a tee signalized intersection. Free-flowing right turns are provided from both directions of Dixon Landing Road onto I-880 south. A marked crosswalk is provided across the free-flowing eastbound Dixon Landing Road on-ramp onto I-880 south, as well as pedestrian curb ramps, but no pedestrian signal is provided.

Dixon Landing Road/Northbound I-880 Ramps–California Circle is a four-legged signalized intersection with protected left-turn phasing on all approaches except eastbound Dixon Landing Road, where left turns are prohibited. A right turn overlay is provided on the northbound California Circle approach. The Northbound I-880 ramps on the north leg turns into California Circle on the south leg. A marked crosswalk and pedestrian signals are provided across the south California Circle leg, as well as pedestrian curb ramps.

California Circle/Northbound I-880 Ramps is a signalized tee intersection, with protected left-turn phasing on the northbound California Circle approach and a right turn overlay on the I-880 off-ramp approach. A marked crosswalk and pedestrian signals are provided across the south California Circle leg, as well as pedestrian curb ramps.

Dixon Landing Road/Milmont Drive is a four-legged signalized intersection, with protected left-turn phasing on both Dixon Landing Road approaches, and split phasing on the Milmont Drive approaches. A right turn overlay is provided on the southbound Milmont Drive approach. Marked crosswalks and pedestrian signals are provided across all legs except the west Dixon Landing Road leg, as well as pedestrian curb ramps.

North Milpitas Boulevard/Dixon Landing Road is a four-legged signalized intersection with protected left-turn phasing on all approaches. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

North Milpitas Boulevard/Jacklin Road–North Abel Street is a four-legged intersection with split phasing on the Jacklin Road and North Abel Street approaches (in other words, the two approaches operate separately) and protected left-turn phasing on the North Milpitas Boulevard approaches. North Abel Street on the west leg turns into Jacklin Road on the east leg. The southbound North Milpitas approach has a channelized right turn onto westbound North Abel Street. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

Hillview Drive/Jacklin Road is a four-legged signalized intersection with protected left-turn phasing on both Jacklin Road approaches, and split phasing on the Hillview Drive approaches. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

I-680 Southbound Ramps/Jacklin Road is a four-legged signalized intersection, with protected left-turn phasing on the westbound Jacklin Road approach and right turn channelization on the eastbound Jacklin Road approach. Marked crosswalks and pedestrian signals are provided across all legs except the west Jacklin Road leg, as well as pedestrian curb ramps.

I-680 Northbound Ramps/Jacklin Road is a four-legged signalized intersection with protected left-turn phasing on the eastbound Jacklin Road approach. Marked crosswalks and pedestrian signals are provided across all legs except the west Jacklin Road leg, as well as pedestrian curb ramps.

North McCarthy Boulevard/Ranch Drive South is a four-legged signalized intersection with protected left-turn phasing on all approaches. Northbound North McCarthy Boulevard has a right turn overlap onto eastbound Rach Drive. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

McCarthy Boulevard/SR-237 Westbound Ramps is a four-legged signalized intersection with protected left-turn phasing on northbound McCarthy Boulevard onto the westbound SR-237 on-ramp. Marked crosswalks and pedestrian signals are provided across the North McCarthy Boulevard leg and both SR-237 legs, as well as pedestrian curb ramps.

McCarthy Boulevard/SR-237 Eastbound Ramps is a four-legged signalized intersection with protected left-turn phasing on southbound McCarthy Boulevard onto the eastbound SR-237 onramp. A bike path joins the intersection on the southwest corner. Marked crosswalks and pedestrian signals are provided across the south North McCarthy Boulevard leg and both SR-237 legs, as well as pedestrian curb ramps.

McCarthy Boulevard/Technology Drive-Bellew Drive is a four-legged signalized intersection with protected left-turn phasing on all approaches and a right turn overlay on the westbound Bellew Drive approach. Bellew Drive on the east leg turns into Technology Drive on the west leg. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

SR-237 – Calaveras Blvd/Southbound I-880 Off-Ramp is a signalized tee intersection with a free-flowing right turn from westbound Calaveras Boulevard onto the I-880 southbound onramp.

Marked crosswalks and pedestrian curb ramps are provided across the I-880 leg, as well as pedestrian signals across the southbound I-880 off-ramp approach.

I-880 Northbound Off-Ramp/West Calaveras Boulevard is a signalized tee intersection with protected left-turn phasing on the northbound I-880 off-ramp approach. Marked crosswalks and pedestrian signals are provided across the northbound I-880 off-ramp and east West Calaveras Boulevard legs, as well as pedestrian curb ramps.

South Abbott Avenue/West Calaveras Boulevard is a four-legged signalized intersection with protected left-turn phasing on the West Calaveras Boulevard approaches. Southbound South Abbot Avenue has a channelized right turn onto westbound West Calaveras Boulevard. Marked crosswalks and pedestrian signals are provided across both South Abbot Avenue legs, as well as pedestrian curb ramps.

Serra Way/West Calaveras Boulevard is a four-legged signalized intersection with protected left-turn phasing on both West Calaveras Boulevard approaches. Right turn channelization is provided from eastbound West Calaveras Boulevard onto eastbound Serra Way, and from westbound Serra Way onto eastbound Calaveras Boulevard. Marked crosswalks and pedestrian signals are provided across the east West Calaveras Boulevard leg and both Serra Way legs, as well as pedestrian curb ramps.

Abel Street/West Calaveras Boulevard is a four-legged signalized intersection with protected left-turn phasing on all approaches. Both West Calaveras Boulevard approaches have channelized right turns onto Abel Street. A right turn overlap is provided from northbound South Abel Street to eastbound West Calaveras Boulevard. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

North Milpitas Boulevard/East Calaveras Boulevard is a four-legged signalized intersection with protected left-turn phasing on all approaches. All approaches have channelized right turns, except from northbound Milpitas Boulevard onto eastbound East Calaveras Boulevard. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

Calaveras Boulevard/Hillview Drive is a four-legged signalized intersection, with protected left-turn phasing on both Calaveras Boulevard approaches, and split traffic signal phasing on the Hillview Drive approaches. Marked crosswalks and pedestrian signals are provided across all legs except the east Calaveras Boulevard leg, as well as pedestrian curb ramps.

Calaveras Boulevard/Park Victoria Drive is a four-legged signalized intersection, with protected left-turn phasing on both Calaveras Boulevard approaches, and split phasing on the Park Victoria Drive approaches. Marked crosswalks and pedestrian signals are provided across all legs, as well as pedestrian curb ramps.

McCarthy Boulevard/Alder Drive is a tee signalized intersection with protected left-turn phasing on the southbound McCarthy Boulevard approach. A marked crosswalk and pedestrian signals are provided across the Alder Drive leg, as well as pedestrian curb ramps.

McCarthy Boulevard/East Tasman Drive is a four-legged signalized intersection with protected left-turn phasing on all approaches. The southbound McCarthy Boulevard approach has a right turn overlap built into the traffic signal phasing. VTA's Alum Rock – Santa Teresa light rail line runs along the median of East Tasman Drive and crosses McCarthy Boulevard in the intersection. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

Alder Drive/East Tasman Drive is a four-legged signalized intersection with protected left-turn phasing on all approaches. VTA's Alum Rock – Santa Teresa light rail line runs along the median of East Tasman Drive and crosses McCarthy Boulevard in the intersection. The I-880/Milpitas VTA station is located in the median of the west leg of East Tasman Drive. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

East Tasman Drive/I-880 Southbound Ramps is a four-legged signalized intersection with protected left-turn phasing on the westbound Tasman Drive approach. VTA's Alum Rock – Santa Teresa light rail line runs along the median of Tasman Drive and crosses the I-880 southbound ramps in the intersection. Marked crosswalks and pedestrian signals are provided across both I-880 ramp legs, as well as pedestrian curb ramps.

I-880 Northbound Ramps – Thompson Street/Great Mall Parkway is a four-legged signalized intersection with protected left-turn phasing on both Great Mall Parkway approaches, and left turn split phasing on the Thompson Street and I-880 northbound off-ramp approaches. Right turn channelization is provided on eastbound Great Mall Parkway onto the I-880 northbound onramp. VTA's Alum Rock – Santa Teresa light rail line runs along the median of the Great Mall Parkway and crosses Thompson Street and the I-880 northbound ramps in the intersection. Thompson Street on the north leg turns into the I-880 northbound ramps on the south leg. Marked crosswalks and pedestrian signals are provided across all legs except the east Great Mall Parkway leg, as well as pedestrian curb ramps.

South Abel Street/Great Mall Parkway is a four-legged signalized intersection with protected left-turn phasing on all approaches. Right turn channelization is provided from northbound South Abel Street to eastbound Great Mall Parkway. VTA's Alum Rock – Santa Teresa light rail line runs along the median of Great Mall Parkway and is grade separated above the intersection. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

South Main Street/Great Mall Parkway is a four-legged signalized intersection with protected left-turn phasing on all approaches. South Main Street has channelized right turns onto Great Mall Parkway in both directions. Additionally, westbound Great Mall Parkway has a channelized left turn onto southbound South Main Street. Union Pacific Railroad tracks run parallel to and along the east side of South Main Street and pass through the eastern leg of the intersection. Railroad signal infrastructure and crossing arms are located across the intersection's eastern leg. The Santa Clara

Valley Transportation Authority's (VTA's) Alum Rock – Santa Teresa light rail line runs on elevated tracks above the median of Great Mall Parkway, including a grade-separated station above the intersection. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

South Main Street/South Abel Street is a signalized tee intersection with protected left-turn phasing on the westbound South Main Street and southbound South Abel Street approaches. South Main Street continues from the south leg to the east leg, as the north leg turns into South Abel Street. Northbound South Main Street has a channelized right turn onto eastbound South Main Street. Marked crosswalks and pedestrian signals are provided across all three legs, as well as pedestrian curb ramps.

Great Mall Drive – McCandless Drive/Great Mall Parkway is a four-legged signalized intersection with protected left-turn phasing on all approaches. VTA's Alum Rock – Santa Teresa light rail line runs along the median of Great Mall Parkway and is grade separated above the intersection. Great Mall Drive on the north leg turns into McCandless Drive on the south leg. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

Great Mall Parkway/Centre Pointe Drive – Mustang Drive is a four-legged signalized intersection with protected left-turn phasing on all approaches. VTA's Alum Rock – Santa Teresa light rail line runs along the median of the Great Mall Parkway and is grade-separated above the intersection. Mustang Drive on the north leg turns into Centre Pointe Drive on the south leg. Marked crosswalks and pedestrian signals are provided across all legs, as well as pedestrian curb ramps.

Montague Expressway/Great Mall Parkway – East Capitol Avenue is a four-legged signalized intersection with protected left-turn phasing on all approaches, and right turn channelization on all approaches except for southbound Montague Expressway. Southbound Montague Expressway has a channelized left turn, as well as a future HOV designation on the outermost through lane. Great Mall Parkway on the west leg turns into East Capitol Avenue on the east leg. Marked crosswalks and pedestrian signals are provided across all legs, as well as pedestrian curb ramps on all corners except for on the southwest side of the intersection where there is no sidewalk.

South Milpitas Boulevard/Montague Expressway is a four-legged signalized intersection with right turn channelization on westbound Montague Expressway and southbound South Milpitas Boulevard. The right-most westbound Montague Expressway through lane is designated as an HOV lane.

I-680 Northbound Off-Ramp/Dempsey Road – Landess Avenue is a four-legged signalized intersection, with protected left-turn phasing on the eastbound Landess Road approach and a right turn overlap traffic signal phase on the I-680 northbound off-ramp approach. The I-680 northbound off-ramp on the south leg turns into Dempsey Road on the north leg. Marked crosswalks and pedestrian signals are provided across all legs except the east Landess Road leg, as well as pedestrian curb ramps.

McCarthy Boulevard – O'Toole Avenue/Montague Expressway is a four-legged signalized intersection with protected left-turn phasing on all approaches, and right turn channelization on all approaches except for eastbound Montague Expressway. McCarthy Boulevard on the north leg turns into O'Toole Avenue on the south leg. Marked crosswalks and pedestrian signals are provided across all legs except the east Montague Expressway leg. There are pedestrian curb ramps on all corners except for on the northeast side of the intersection where there is no sidewalk.

South Main Street-Oakland Road/Montague Expressway is a four-legged signalized intersection with protected left-turn phasing and right turn channelization on all approaches. South Main Street on the north leg turns into Oakland Road on the south leg. Marked crosswalks and pedestrian signals are provided across all four legs, as well as pedestrian curb ramps.

Montague Expressway/Trade Zone Boulevard – McCandless Drive is a four-legged signalized intersection, with protected left-turn phasing on both Montague Expressway approaches, split phasing on the McCandless Drive and Trade Zone Boulevard approaches, and a right turn overlay on the eastbound Montague Expressway approach. Right turn channelization is provided on all approaches. McCandless Drive on the north leg turns into Trade Zone Boulevard on the south leg. Marked crosswalks and pedestrian signals are provided on the east Montague Expressway and McCandless Drive legs, as well as pedestrian curb ramps.

Traffic volumes at all study intersections were obtained in September and October 2016, while schools were in session. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute. The Covid-19 pandemic has resulted in notable changes to traffic patterns, commute patterns, and overall trip numbers throughout California, including Milpitas. As a result, travel patterns in 2020 are not representative of "typical" conditions in Milpitas pre-pandemic, and are not anticipated to be representative of local travel conditions post-pandemic. As such, the traffic volumes noted above are based on the most recent available data, and are provided for informational purposes only. As described in greater detail under the Methods of Analysis subheading below, weekday daily, a.m. peak hour, and p.m. peak hour volume forecasts as well the number of vehicle miles traveled for the General Plan analysis were developed using the Valley Transportation Travel Demand Model. Trip generation and vehicle miles traveled specific to the General Plan can be derived from VTA model, which computes weekday daily, weekday AM and weekday PM peak hour trips.

TRANSIT SERVICE

Bus Transit Operations

Bus service in Milpitas is provided by VTA for travel within Santa Clara County and by Alameda-Contra Costa (AC) Transit District, for travel to and from Alameda County. An exhibit showing bus routes in and surrounding Milpitas is provided in Figure 3.14-3. Starting October 2020, the Valley

Transportation Authority (VTA) started public outreach seeking public input on the Draft 2021 Transit Service Plan. The draft Service Plan will reflect several new realities related to the COVID-19 pandemic, including lower sales tax revenues, new travel patterns, and potentially lower ridership. Three proposals are the subject of community engagement through mid-October. These scenarios reflect a 10-, 20-, and 30-percent reduction in transit service hours when compared to the pre-COVID network. The 20% and 30% options are anticipated to affect land use, CEQA analysis and affordable housing projects. Based on community feedback and analysis, VTA staff will revise the three service plan proposals and bring to the Board for consideration on December 3, 2020.

VTA Express Bus Routes

VTA operates Express bus route that link residential centers of Santa Clara County to Silicon Valley industrial centers. The following regularly scheduled fixed-route Express route serves the City of Milpitas:

Route 104 is an express route that connects Milpitas to Palo Alto, Mountain View, San Jose, and the Valley Health Center from the Milpitas Transit Center. Route 104 operates Monday through Friday with two runs in each direction daily. The westbound runs are 37 minutes apart during the morning peak hours, and the eastbound runs are approximately 30 minutes apart during the evening peak hours.

VTA Local Bus Routes

VTA operates a network of local bus routes that serve the urbanized portions of Santa Clara County. These routes serve arterial streets, neighborhoods, schools, shopping areas, and employment centers. The following local routes serve the City of Milpitas:

Route 20 is a local route that connections the Milpitas BART Station to the Sunnyvale Transit Center. Route 20 operates Monday through Friday with service between 6:30 a.m. and 7:00 p.m., with approximately 30 minute headways.

Route 44 is a local route that connects the McCarthy Ranch Shopping Center, the Alder Light Rail Station, the Great Mall, and the Milpitas BART Station. Route 44 operates service between 6:30 a.m. and 7:00 p.m., with approximately 60 minute headways.

Route 47 is a local route that connects the Great Mall to the Valley Health Center and McCarthy Ranch Shopping Center, primarily along the Montague Expressway, Park Victoria Road, Calaveras Boulevard, and McCarthy Boulevard. Route 47 operates service from the mornings through early evenings daily, with 30-minute headways on Monday to Saturday mornings and afternoons, 40-65 minute headways on Monday to Saturday evenings, and 45-60 minute headways on Sundays.

Route 60 is a local route which connects the Milpitas BART Station and Winchester Light Rail Station via the San Jose Airport. Monday through Friday, the route operates between 5:00 a.m. and 11:30 p.m. including headways of approximately 15-30 minutes. On weekends, the route operates between the approximate hours of 6:00 a.m. and 11:30 p.m. with headways of roughly 30 minutes.

Route 66 is a local route that connects Milpitas to Santa Teresa in San Jose. Route 66 operates daily with 10-20 minute headways Monday to Saturday during the day, 30-60 minute headways Monday to Saturday late evenings, 20 minute headways on Sunday during the day, and 45-60 minute headways Sunday evenings.

Route 70 is a local route that connects the Milpitas BART Station to the Eastridge Transit Center in San Jose via Jackson Avenue. Route 70 operates daily, with 15-20 minute headways Monday to Saturdays during the day, 30-60 minute headways Monday to Saturday late evenings, 20 minute headways Sunday during the day, and 40-60 minute headways Sunday mornings and evenings.

Route 71 is a local route that connects the Milpitas BART Station and Milpitas to the Eastridge Transit Center and the VTA Capitol Light Rail Station, primarily along Piedmont/White Road and Capitol Expressway. Route 71 operates daily, with 20-30 minute headways, Monday to Saturday, during the day, 60 minute headways Monday to Saturday evenings, and 45-60 minute headways on Sundays.

Route 77 is a local route that connects the Great Mall and Milpitas to the Eastridge Transit Center, primarily along McCandless, and Lundy Avenue/King Road. Route 77 operates service from the mornings through evenings every day of the week, with 15-20 minute headways on weekday mornings through early evenings, 45-60 minute headways on weekday evenings, and 30-45 minute headways on weekends.

AC TRANSIT BUS ROUTES

AC Transit provides regularly-scheduled fixed-route service throughout Alameda and Contra Costa Counties. One AC Transit route provides service to the City of Milpitas:

Route 217 is a local route that connects the Great Mall and Milpitas to Fremont and the Fremont BART station, primarily along Mission Boulevard, Warm Springs Boulevard, and North Milpitas Boulevard. Route 217 operates daily, with 20-30 minute headways on weekdays and 30 minute headways on weekends.

ACE SHUTTLE BUS ROUTES

Altamont Commuter Express (ACE) provides regularly-scheduled fixed-route bus service from rail stations in Santa Clara County. These shuttle buses are coordinated to connect with ACE train departures. Eight shuttle routes serve the Great America ACE Station in the City of Santa Clara, two of which connect to the City of Milpitas:

The Purple Shuttle is a local route that connects the ACE Great America Station in the City of Santa Clara to Milpitas along Tasman Drive and McCarthy Boulevard. This route operates on weekdays, with two trips in each direction. The eastbound trips operate on approximately 60 minute headways during the morning peak hours, and the westbound trips operate on a 60 minute headway during the evening peak hours.

The Violet Shuttle is a local route that connects the ACE Great America Station in the City of Santa Clara to Milpitas along McCarthy Boulevard and the Montague Expressway. This route operates on

weekdays, with two runs in each direction. The eastbound trips operate on approximately 60 minute headways during the morning peak hours, and the westbound trips operate on a 60 minute headway during the evening peak hours.

PARATRANSIT

Paratransit, also known as dial-a-ride or door-to-door service, is available for those that are unable to independently use the transit system due to a physical or mental disability. Individuals must be registered and certified as ADA eligible before using the service. Paratransit operators are required by the ADA to service areas within three-quarters of a mile of their respective, public fixed-route service and VTA also offers service for trips within a premium zone extending an additional mile beyond the three-quarter-mile standard zone. VTA Access Paratransit is operated by Outreach & Escort, Inc. and is available only during the regularly scheduled operating hours of the corresponding bus or light rail route. Ride reservations can be scheduled in advance.

VTA Light Rail Transit Operations

VTA operates light rail routes that link various Santa Clara Valley residential and employment centers to downtown San Jose. One light rail route directly serves the City of Milpitas:

The Orange Line connects Milpitas to Mountain View in the west and San Jose to the south, with three stops in Milpitas at I-880 and Tasman Drive, the Great Mall Transit Station, and the Milpitas BART Station. Service is provided daily with 15-minute headways during the day, and 20-30 minute headways during the early morning and late evening.

Bay Area Rapid Transit (BART) Operations

BART operates five heavy rail intercity transit lines in Contra Costa, Alameda, San Francisco, San Mateo and Santa Clara counties. These lines typically operate at high speeds and frequencies of 15-20 minutes per line. In 2020, the Milpitas BART station, located on the south side of the Montague Expressway across from the Great Mall, opened for service, along with an extension to east San Jose. BART connects Milpitas to regional locations, including downtown San Francisco and Oakland as well as San Francisco and Oakland international airports. BART service operates on 15-20 minute headways from 4am to 12am weekdays, 6am to 12am Saturdays, and 8am to 12am Sundays.

Milpitas Transit Center

The Milpitas Transit Center has been relocated to its site adjacent to the Milpitas BART station. In addition to BART, it serves eight bus lines and a light rail line.

Park and Ride Lots

Milpitas has two 'park and ride' lots, both located at VTA light rail stations. One is located at the I-880/Milpitas Station on East Tasman Drive and the other is located at the Great Mall/Main Street Station on Great Mall Parkway. Both lots provide bus service in addition to light rail service.

On-Demand Transportation Services

Taxi service in Milpitas is provided by private operators that serve the greater Santa Clara County area and beyond. Taxi service is available 24 hours a day, seven days a week by calling in a service request. Other ride-hailing applications are also available in Milpitas and provide transportation throughout the Bay Area.

Bus routes in Milpitas are illustrated in Figure 3.14-3.

BICYCLE FACILITIES

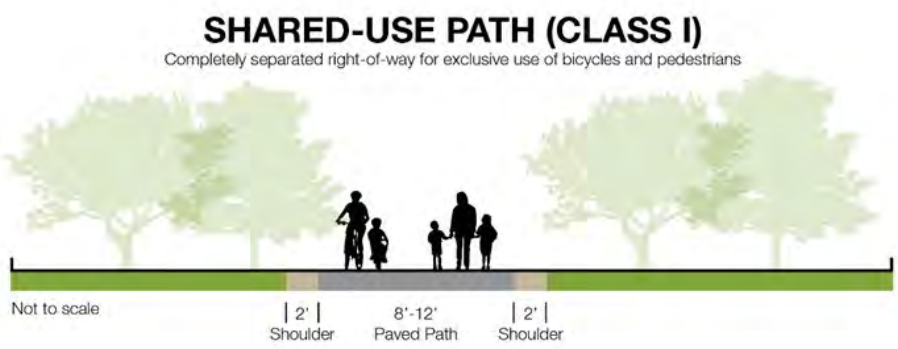
Bicycle circulation in Milpitas is supported by an existing network of multi-use paths, on-street bike lanes, and bicycle routes. Notable facilities include the Coyote Creek Trail, which is part of the San Francisco Bay Trail and follows the western City Limits and extends from San Jose to Fremont, and the Berryessa Creek Trail, which provides north-south connectivity in Milpitas from North Abel Street to East Calaveras Boulevard, and from Calaveras Boulevard south to the end at Ames Avenue. Other Class I trails include the Augustine Park Trail and the Oliver Jones Park Trail, both of which connect the City of Fremont to the Berryessa Creek Trail. An extensive network of Class II on-street bike lanes and Class III bicycle routes along major arterials connects many destinations in the City to Class I trails. The City's Bikeway & Pedestrian Master Plan Update proposes extending the Berryessa Creek Trail south to the site of the Milpitas BART Station and upgrading some Class III bicycle routes to Class II facilities to improve connectivity. Additionally, several spot improvements are proposed which would enhance connectivity at intersections, trailheads, and to new trail connections.

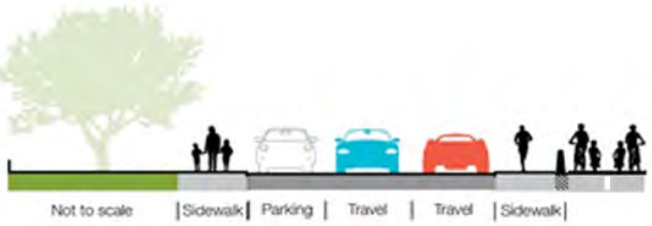
Bicycle parking facilities are available at strategic locations throughout the City. Bicycle racks for short-term parking are provided at various locations in Milpitas including City Hall, the Great Mall of the Bay Area, and all schools in Milpitas. Bicycle lockers are available at the I-880/Milpitas and Great Mall/Main VTA light rail stations. The Milpitas BART station includes 221 bike parking spaces. There are 185 self-service indoor bicycle storage spaces, 24 eLockers, and 12 spaces at bike racks. The indoor storage spaces and eLockers are part of the regional BikeLink system, enabling users with an account to use facilities throughout the Bay Area.

Figure 3.14-4 displays the existing designated bicycle facilities in the city.

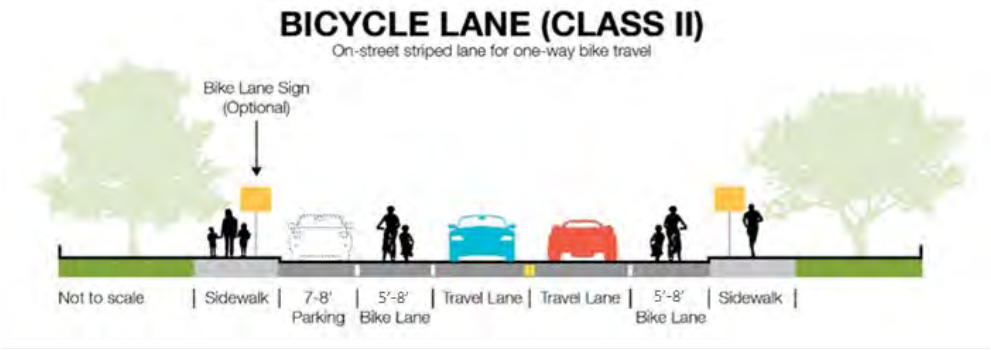
Bicycle facilities are categorized into four types, as described and depicted in illustrations below. Note that while the graphics include typical widths for the various facilities, the exact configuration of a bike facility can vary depending on its location and the jurisdiction's preferences.

- **Class I Multi-Use Path –** a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.

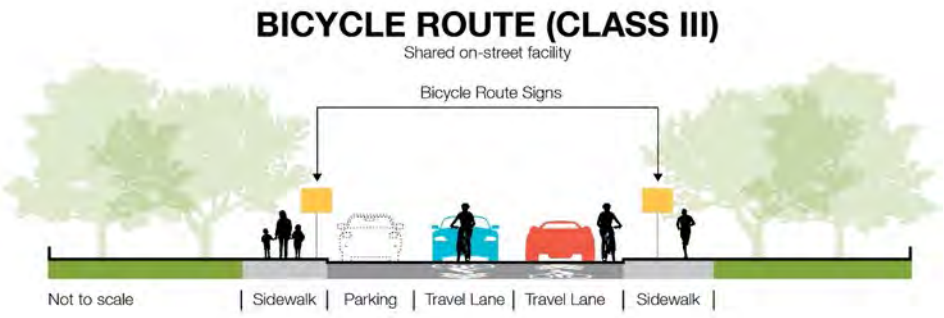




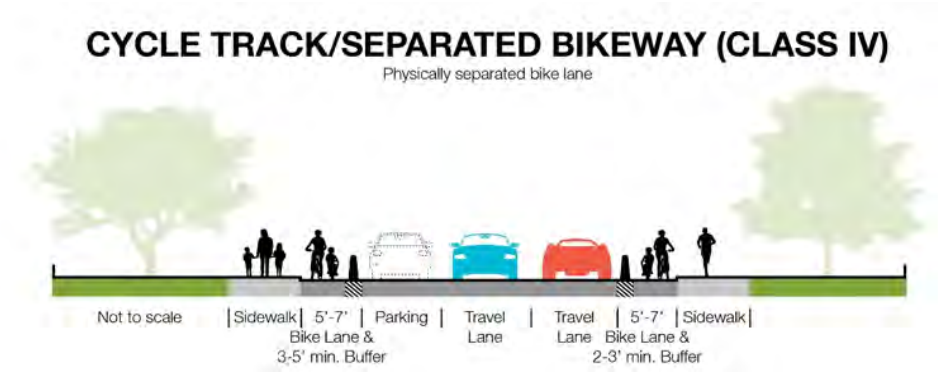
- **Class II Bike Lane –** a striped and signed lane for one-way bike travel on a street or highway. Additionally, Class II Bike Lanes are occasionally designed to include a spatial buffer between motorists and cyclists. As such, buffered Class II Bike Lanes include striping to provide additional separation between the two travel modes.



- **Class III Bike Route –** signing only for shared use with motor vehicles within the same travel lane on a street or highway.



- **Class IV Bikeway (Cycle Track) –** also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.



PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal infrastructure, curb ramps, and streetscape amenities. These facilities are provided at most every intersection, with only a few exceptions detailed by intersection in the Study Intersections section below. Milpitas has very thorough sidewalk coverage, despite several north-south barriers through the city, namely I-880, I-680, and the Union Pacific Railroad tracks.

While marked crosswalks and signal pedestrian crossing phasing is provided at most signalized intersections, in some situations, a pedestrian may need to cross six or more travel lanes, effectively resulting in a barrier to these users.

There are several existing and planned pedestrian overcrossings at locations including Great Mall Parkway and along Montague Expressway. These connections provide access to the elevated light rail line and a direct connection to the parking lot at the Milpitas BART station. While two of the overcrossings only provide a link from one side of the street to the light rail station in the median of Great Mall Parkway, additional extensions are planned across the other half of the roadway to better connect residential developments to the regional transit system, the Great Mall, and other destinations. Further, it is noted that several additional pedestrian facilities will be proposed under the Bike & Pedestrian & Trails Master Plan update, as well as the Transit Area Specific Plan Update.

Pedestrian projects included in Bike & Pedestrian & Trails Master Plan update, and the Transit Area Specific Plan Update include but are not limited to:

TABLE 3.14-1: PROPOSED PEDESTRIAN FACILITIES IMPROVEMENTS

PROJECT TYPE	*LOCATION*	*CROSS STREET*
Sidewalk Gap/Improvement	Tasman Dr	McCarthy Blvd to Alder Dr
Sidewalk Gap/Improvement	Abel St	Redwood Ave to Milpitas Blvd
Sidewalk Gap/Improvement	Calaveras Blvd	Carnegie Dr to Protected Crossing
Sidewalk Gap/Improvement	Dixon Landing Rd	McCarthy Blvd to Milmont
Sidewalk Gap/Improvement	Montague Expressway	Berryessa Creek to Trade Zone Blvd
Intersection/Crossing Improvement	Arizona Avenue	Washington Drive
Intersection/Crossing Improvement	Milpitas Blvd	Tramway Dr
Intersection/Crossing Improvement	Arizona Avenue	Washington Drive
Intersection/Crossing Improvement	Yellowstone Ave	Murphy Park
Intersection/Crossing Improvement	Dixon Rd	Conway St
Intersection/Crossing Improvement	Dixon Landing Rd	California Circle

SOURCE: ALTA PLANNING + DESIGN, 2020

Freight/Goods Movement

The Surface Transportation Assistance Act (STAA) of 1982 defines a network of state facilities as truck routes which accommodate large trucks. Section §100-12.05 of the Milpitas Municipal Code establishes the City's ability to designate truck routes within the City. The Municipal Code allows truck drivers to use other City streets as well, as long as those streets comprise the most direct route between the nearest truck route and the freight origin or destination, unless such movements are expressly prohibited by posted signs. The truck routes in Milpitas are shown in Figure 3.14-5.

Aviation System

Norman Y. Mineta San Jose International Airport, located approximately six miles southwest of Milpitas within the City of San Jose and adjacent to the City of Santa Clara, is a commercial airport serving passenger and cargo airplanes. Residents and visitors of Milpitas can access the airport via I-880. Other passenger airports in the region include San Francisco International Airport and Oakland International Airport

3.14.2 REGULATORY SETTING

The City of Milpitas General Plan and a variety of regional, State, and Federal plans, legislation, and policy directives provide guidelines for the safe operation of streets and transportation facilities in Milpitas. While the City of Milpitas has primary responsibility for the maintenance and operation of local transportation facilities in its jurisdiction, Milpitas staff works on a continual basis with responsible regional, State, and Federal agencies, including the Santa Clara Valley Transportation Authority (VTA), the Metropolitan Transportation Commission (MTC), the Association of Bay Area Government (ABAG), the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA), as well as others, to maintain, improve, and balance the competing transportation needs of the community.

FEDERAL

Americans With Disabilities Act

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. To implement this goal, the United States Access Board has created accessibility guidelines for public rights-of-way. The guidelines 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.

The City of Milpitas is committed to ensure that people with disabilities have access to City programs, services, activities and facilities. In all of its services, programs, events, activities, facilities, and public meetings, the City strives to eliminate any barriers that prohibit people with disabilities from full access to facilities.

Federal Highway Administration

The FHWA is a federal agency that focuses on national highway programs. FHWA administers and manages federal highway programs and establishes national standards. The FHWA publishes the Manual on Uniform Traffic Control Devices (MUTCD) which specifies the standards for street markings, traffic signals, and street signs in the United States. Caltrans developed the California MUTCD based on the FHWA MUTCD.

STATE

Caltrans

DEPUTY DIRECTIVE 64-R1: COMPLETE STREETS – INTEGRATING THE TRANSPORTATION SYSTEM

In 2001, Caltrans adopted Deputy Directive (DD) 64; a policy directive related to non-motorized travel throughout the state. In October 2008, DD 64 was strengthened to reflect changing priorities and challenges. DD 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."*

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. This policy establishes support for balancing transportation needs with community goals. Caltrans seeks to involve and integrate community goals in the planning, design, construction, and maintenance and operations processes, including accommodating the needs of bicyclists and pedestrians. 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.*

- **Caltrans Project Development Procedures Manual**: This manual outlines pertinent statutory requirements, planning policies, and implementing procedures regarding transportation facilities. It is continually and incrementally updated to reflect changes in policy and procedures. For example, the most recent revision incorporates the Complete Streets policy from Deputy Directive 64-R1, which is detailed below.
- **Caltrans Deputy Directive 64 (2001)**: This directive requires Caltrans to consider the needs of non-motorized travelers, including pedestrians, bicyclists, and persons with disabilities, in all programming, planning, maintenance, construction, operations, and project development activities and products. This includes incorporation of the best available standards in all of the Department's practices.
- **Caltrans Deputy Directive 64-R1 (2014)**: This directive requires Caltrans to provide for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the state highway system. Caltrans supports bicycle, pedestrian, and transit travel with a focus on "complete streets" that begins early in system planning and continues through project construction and maintenance and operations.
- **Environmental Assessment Review and Comment**: Caltrans, as a responsible agency under CEQA, is available for early consultation on a project to provide guidance on applicable transportation analysis methodologies or other transportation related issues and is responsible for reviewing the traffic impact study for errors and omissions pertaining to the state highway facilities. In February 2020 Caltrans issued a Draft VMT-Focused Transportation Impact Study Guide (Draft TISG) to replace an earlier version (Guide for the Preparation of Traffic Impact Studies, December 2002). The updated TISG establishes Vehicles Miles Traveled (VMT) as the Measures of Effectiveness, as opposed to Level of Service under the prior guide. The Measures of Effectiveness is used to determine significant impact on state facilities. The Guide also mandates that the traffic analysis includes mitigation measures to lessen the potential project impacts on state facilities and the project's fair share responsibility for the impacts. However, the ultimate mitigation measures and their implementations are to be determined upon consultation between Caltrans, the City and the project proponent.

OPR General Plan Guidelines

The Governor's Office of Planning and Research (OPR) publishes General Plan Guidelines as a "how to" for cities and counties developing their general plans. OPR released its updated guidelines in 2017, which includes legislative changes, new guidance, policy recommendations, external links to resource documents, and additional resources. For each general plan element, the guidelines discuss statutory requirements in detail, provide recommended policy language, and include examples of city and county general plans that have adopted similar policies.

Climate Protection Legislation – Assembly Bill 32, Senate Bill 32 and Senate Bill 375

Assembly Bill (AB) 32, also known as the Global Warming Solutions Act of 2006, committed California to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources

Board (ARB), which is coordinating the response to comply with AB 32, is currently on schedule to meet this deadline. In 2016, Senate Bill (SB) 32 added a new target: reducing statewide emissions to 40 percent below 1990 levels by 2030.

SB 375 provides guidance for curbing emissions from cars and light trucks to help California comply with AB 32. There are five major components to SB 375:

- ARB will guide the adoption of GHG emission targets to be met by each Metropolitan Planning Organization (MPO) in the state.
- MPOs are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting these regional targets. The SCS must be consistent with the Regional Transportation Plan (RTP).
- Regional housing elements and transportation plans must be synchronized on eight-year schedules. Also, the SCS and Regional Housing Needs Assessment (RHNA) must be consistent with each other.
- CEQA is streamlined for preferred development types such as mixed-use projects and transit-oriented developments (TODs) if they meet specific requirements.
- MPOs must use transportation and air emission modeling methodologies consistent with California Transportation Commission (CTC) guidelines.

California Complete Streets Act

Originally passed in 2008, California's Complete Streets Act took effect in 2011 and requires local jurisdictions to plan for land use transportation policies that reflect a "complete streets" approach to mobility. "Complete streets" comprises a suite of policies and street design guidelines which provide for the needs of all road users, including pedestrians, bicyclists, transit operators and riders, children, the elderly, and the disabled. From 2011 onward, any local jurisdiction—county or city—that undertakes a substantive update of the circulation element of its general plan must consider "complete streets" and incorporate corresponding policies and programs. In 2010, OPR released guidelines for compliance with this legislation which provide direction on how circulation elements can best plan for a variety of travel modes such as transit, walking, bicycling, and freight.

Senate Bill 743

On September 27, 2013, SB 743 was signed into law.[1] The Legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of GHG, as required by

[1] An act to amend Sections 65088.1 and 65088.4 of the Government Code, and to amend Sections 21181, 21183, 21186, 21187, 21189.1, and 21189.3 of, to add Section 21155.4 to, to add Chapter 2.7 (commencing with Section 21099) to Division 13 of, to add and repeal Section 21168.6.6 of, and to repeal and add Section 21185 of, the Public Resources Code, relating to environmental quality.

the California Global Warming Solutions Act of 2006 (AB 32). Additionally, the Complete Streets Act (AB 1358), requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. To further the State's commitment to the goals of SB 375, AB 32 and AB 1358, SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Division 13 (Section 21099) of the Public Resources Code.

SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts in many parts of California (if not statewide). Further, parking impacts are not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. SB 743 includes amendments that revises the definition of "in-fill opportunity zones" to allow cities and counties to opt out of traditional LOS standards established by congestion management programs (CMPs) and requires OPR to update the CEQA Guidelines and establish "criteria for determining the significance of transportation impacts of projects within transit priority areas.[2] As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." SB 743-compliant CEQA analysis became mandatory on July 1, 2020.

In December 2018, OPR released a final advisory to guide lead agencies in implementing SB 743, *Technical Advisory on Evaluating Transportation Impacts in CEQA*. This advisory became effective as of July 1, 2020. Key guidance includes:

- VMT is the most appropriate metric to evaluate a project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a "per rate" basis. Specifically, OPR recommends VMT per capita for residential projects and VMT per employee for office projects.
- OPR's recommended impact threshold for residential and office projects is VMT per capita or per employee that is fifteen percent below the city or regional average (whichever is applied). In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. This threshold is in line with statewide greenhouse gas emission reduction targets.
- For retail projects, OPR recommends measuring the net decrease or increase in VMT in the study area with and without the project. The recommended impact threshold is any increase in total VMT.

[2] A "transit priority area" is defined in as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in Public Resources Code Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

- Lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.
- Cities and counties still have the ability to use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics cannot constitute the sole basis for CEQA impacts.

Assembly Bill 417

In October 2013, AB 417 created a statutory CEQA exemption for bicycle plans in urbanized areas. Before the passage of this bill, cities and counties that prepared bicycle plans were required to carry out a CEQA review. AB 417 exempts the following types of bicycle projects in an urbanized area:

- Restriping of streets and highways;
- Bicycle parking and storage;
- Signal timing to improve intersection operations;
- Signage for bicycles, pedestrians, and vehicles.

However, not all bicycle plans are exempt if certain conditions are met (e.g., a new Class I bicycle trail through a sensitive natural area).

REGIONAL

Metropolitan Transportation Commission (MTC)

The current Regional Transportation Plan (RTP) produced by MTC, Plan Bay Area 2040, was adopted in 2017 as an update to the 2013 Plan Bay Area. While Plan Bay Area 2050 is underway, the document has not yet been finalized. Plan Bay Area 2040 sets forth regional transportation policy and provides capital program planning for all regional, State, and Federally funded projects. In addition, Plan Bay Area provides strategic investment recommendations to improve regional transportation system performance over the next 20 years. Investments in regional highway, transit, local roadway, bicycle, and pedestrian projects are set forth. These projects have been identified through regional and local transportation planning processes, and in Santa Clara County include those projects listed in the VTA's Congestion Management Program. Project recommendations are premised upon factors related to existing infrastructure maintenance, increased transportation system efficiencies, improved traffic and transit operations, and strategic expansions of the regional transportation system.

Santa Clara Valley Transportation Authority (VTA)

Santa Clara VTA is the Congestion Management Agency (CMA) for Santa Clara County and they are tasked with preparing the Congestion Management Plan (CMP) which outlines strategies to address congestion problems and to monitor compliance. MTC requires that the local transportation authorities, such as VTA, establish their own transportation plans that can feed into the larger RTP. The CMP is developed cooperatively with local governments, transit agencies, MTC, Caltrans, and the Bay Area Air Quality Management District.

Association of Bay Area Governments

The Association of Bay Area Governments (ABAG) is a voluntary joint-powers agency that is the San Francisco Bay Area's sub-regional planning organization and serves as a channel for local jurisdictions to engage cooperatively on matters such as regional housing needs, environmental protection, disaster resilience, and energy efficiency. In conjunction with MTC, ABAG's Plan Bay Area 2040 provides the framework of how the Bay Area will grow over the next two decades, identifying transportation and land use strategies to enable equitable and efficient future.

Santa Clara County General Plan

The Santa Clara County General Plan is a long-range comprehensive planning document required by state law and was adopted by the County in 1994 to set uniform policy, guide balanced future growth, create livable communities, and develop responsible resource conservation throughout the County.

Valley Transportation Plan 2040

The Valley Transportation Plan 2040 (VTP) is the comprehensive countywide long-range transportation plan for Santa Clara County developed by VTA. Through its policy and planning framework the VTP covers location-specific improvements for all modes of travel via three programs. The Highways Program includes major freeway improvements, local freeway interchanges, and Express Lanes. The Local Systems Program includes local roadway improvements, Expressway improvements, pedestrian and bicycle projects, and technology-related projects. The Transit Program includes improvements in transit efficiency and new transit improvement projects. The VTP identifies the following projects in Milpitas:

- Calaveras Boulevard widening
- Intersection improvements at Dixon Landing Road and North Milpitas Boulevard
- Berryessa Creek Trail Extension - Hillview Drive to San Jose City limits
- Montague Expressway Bicycle/Pedestrian Overcrossing
- Dixon Landing Road Pedestrian and Bicycle Improvements
- South Milpitas Boulevard SMART corridor
- Citywide Adaptive Bicycle and Pedestrian Timing

Santa Clara Countywide Bicycle Plan

The 2018 *Santa Clara County*wide *Bicycle Plan* assists VTA and member agencies "establish, protect, and enhance bicycling as a viable transportation mode and to assure that bicycling is a practical and safe mode of travel, by itself and in combination with other modes." The Plan identifies bicycle facility projects that have regional or countywide significance. Three specific types of projects were identified: the Cross County Bicycle Corridor network, bike routes to major transit stations and centers, and non-motorized crossings of major physical barriers. The Bay Trail and the Coyote Creek Trail pass through Milpitas and are part of the Cross County Bicycle Corridor network. The Bay Trail connection across the Alameda County Flood Control Channel, between Fremont and McCarthy Boulevard in Milpitas, was identified as a priority project. I-880 at Dixon Landing Road was

specifically identified as a major physical barrier hindering the advancement of bicycle transportation between Fremont and Milpitas. The plan highlights three additional planned and five more potential across barrier connections in Milpitas. Many of these potential crossings are necessary to provide safe bike routes to the new Milpitas BART station. The Plan also recommends minimum lane widths for existing and future bicycle facilities.

VTA Bicycle Technical Guidelines

The 2012 update to the *VTA Bicycle Technical Guidelines* outline standards and guidance for planning, designing, operating, retrofitting and maintaining roadways and bikeways throughout Santa Clara County. The guidelines aim to improve the quality of bicycle facilities and ensure countywide consistency in the design and construction of both bicycle facilities and roadways. They apply to projects that are part of the countywide bicycle network, projects that are funded by the Countywide Bicycle Expenditure Program, and also to all VTA-funded roadway projects. The manual is divided into four sections: Introduction and General Guidance, Technical Guidance for Roadways, Technical Guidance for On-Roadway Bicycle Facilities, and Technical Guidance for Bike-Only Facilities.

VTA Great Streets: Complete Streets Corridor Study

Through a series of corridor studies, VTA is planning to implement complete street concepts along select transportation corridors in Santa Clara County. The goal is to transform select transportation roadways into "high-quality, multimodal streets that prioritize bicycle, pedestrian, and transit travel while still serving motorists." These collaborative planning processes, led by VTA, will include planning and conceptual design work and may result in a number of recommended improvements for transit operations, pedestrian and bicycle safety and connectivity, transit travel time, transit rider amenities, and/or traffic calming measures. In 2017, VTA initiated the Tasman Drive/Great Mall Parkway Complete Streets Corridor Study to focus on the segment from Main Street in Milpitas to Sunnyvale.

LOCAL

Bikeway Master Plan Update

The Bikeway Master Plan was produced by the City's Bicycle Pedestrian Advisory Commission in 2002 and updated in 2009. The Update was developed to build upon the existing bicycle facilities in Milpitas to increase connectivity to schools, public buildings, places of employment, shopping centers, and transit access. The Update plans to connect Milpitas to the larger regional bicycle trail network and utilize new right-of-way to develop off-street bicycle facilities. Beyond the bicycle facilities, the Update aims to educate cyclists and motorists about the rules of road and encourage new cyclists of all ages. In 2019, the City initiated development of a Bicycle/Pedestrian Master Plan, which will incorporate and update the existing Trails Master Plan.

Trails Master Plan

The *Milpitas Trails Master Plan* was completed to provide recommendations for the 2002 Milpitas General Plan update. It recommended an extensive off-street trail system to enhance the quality of life in Milpitas by providing an alternative transportation system, expanding recreational opportunities, and improving the environmental conditions of those trail corridors that parallel creeks.

Streetscape Master Plan

The *City of Milpitas Streetscape Master Plan* provides overall guidelines and recommendations to address major issues related to street trees, landscape treatments and amenities in the public street right-of-way. The Plan includes goals, strategies, and design guidelines for streets by type and provides recommendations for other physical features of the right-of-way, such as medians and sound walls. The Plan was developed through a collaborative planning process and is meant to guide streetscape development and maintenance through 2020.

Midtown Specific Plan

The *2002 Midtown Specific Plan* creates a cohesive vision for development along the South Main Street and South Abel Street corridors. The Plan rezoned existing industrial and commercial land uses to residential and mixed-use, providing the City and opportunity to control and enhance the corridors. The Plan identifies specific locations appropriate for median island and streetscape improvements.

Transit Area Specific Plan

Originally adopted in 2008 and amended in 2011, the Plan is being updated under the name Milpitas Metro. The Plan guides the redevelopment of over 400 acres, near the Great Mall Shopping Center/VTA Light Rail Station and the Milpitas BART Station, currently occupied by industrial uses. The plan calls for the removal of nearly 3 million square feet of industrial uses. The proposed land uses include half a million square feet of shopping, over 7,000 new residential dwelling units, a new hotel, and 800,000 square feet of office space. According to the Draft Environmental Impact Report this Plan will generate over 50,000 new daily trips.

3.14.3 IMPACTS AND MITIGATION MEASURES

METHODS OF ANALYSIS

The analysis assesses how the study area's transportation system would operate with the implementation of the City of Milpitas General Plan Update. The potential impacts were identified based on a set of significance criteria based on the 2020 CEQA Guidelines.

General Plan Traffic

The General Plan will accommodate future growth in Milpitas, including new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes a 20-year horizon, and as such 2040 is assumed to be the buildout year of the General Plan.

Buildout of the General Plan could yield a total of up to 33,401 housing units, a population of 113,530 people, and 84,333 jobs within the Planning Area. This represents development growth over existing conditions of up to 11,186 new housing units, 37,473 people, and 36,795 jobs. It is noted that the proposed land uses represent the full citywide buildout and include existing development in the City.

Weekday daily, a.m. peak hour, and p.m. peak hour volume forecasts as well the number of vehicle miles traveled for the General Plan were developed using the Valley Transportation Travel Demand Model. Trip generation and vehicle miles traveled specific to the General Plan can be derived from VTA model, which computes weekday daily, weekday AM and weekday PM peak hour trips. Under Cumulative Plus Plan conditions, the plan area would generate approximately 80,725 net new daily trips on a typical weekday. The table below reflects the citywide VMT estimates for year 2020, the existing General Plan land uses in 2040, and the Proposed General Plan land uses in 2040.

TABLE 3.14-2: CITYWIDE VEHICLE MILES TRAVELED DEVELOPMENT COMPARISON

VMT METRIC	*MILPITAS 2020 VMT ESTIMATE*	*MILPITAS 2040 EXISTING GENERAL PLAN VMT ESTIMATE*	*MILPITAS 2040 PROPOSED GENERAL PLAN VMT ESTIMATE*
Average Residential VMT per Capita	13.51	12.87	11.03
Average Employment VMT per Employee	20.00	20.37	20.41

SOURCE: VTA, KITTLESON & ASSOCIATES, 2020

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with transportation and circulation if it will:

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

VMT Thresholds

Senate Bill 743 (SB 743), signed into law in 2013, marked a notable change in the identification of environmental impacts under the California Environmental Quality Act (CEQA), requiring CEQA lead agencies to shift from using traditional level of service (LOS) standards and automobile delay to determine significant traffic impacts. As a result of SB 743, the State Office of Planning and Research (OPR) has updated CEQA guidelines and criteria to use vehicle miles traveled (VMT) as the metric for evaluating the significant traffic impacts. Pursuant to Public Resources Code Section 21099(b)(2),

"automobile delay, as described solely by level of service of similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment." The OPR publication "Technical Advisory on Evaluating Transportation Impacts in CEQA", published in December 2018, provides details on VMT assessment, methodologies, and suggested metrics. This requirement went into effect on July 1, 2020.

The City of Milpitas is developing thresholds to evaluate the impacts of VMT associated with land development and transportation projects. The City is also developing tools to help evaluate projects, including screening maps to identify specific areas in the City where project-related VMT for residential and commercial projects is expected to be less than significant.

Because the City of Milpitas has not yet adopted standards of significance for evaluating VMT, guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018, was used. This document indicates that a residential project generating vehicle travel that is 15 or more percent below the existing Citywide or regional residential VMT per capita may indicate a less-than-significant transportation impact. For the purposes of this analysis, the average VMT per capita resulting from buildout of the General Plan was assessed using a significance threshold based on the countywide average for Santa Clara County, which is slightly lower than Milpitas's existing VMT per capita, and therefore reflects the more rigorous of the two potential VMT thresholds.

Similarly, an employment-based project generating vehicle travel that is 15 percent or more below the baseline VMT per employee may indicate a less-than-significant transportation impact. For the purposes of this analysis, the applied VMT per employee significance threshold is based on the countywide average for Santa Clara County, similar to the approach taken by nearby jurisdictions in the County including Palo Alto, Sunnyvale, and Santa Clara. As with residential VMT per capita, the baseline average VMT per employee at the countywide level is lower than the citywide average for Milpitas.

Consistent with OPR guidance, the VTA Travel Demand Model was utilized to estimate the following metrics for comparison purposes:

- Average VMT per resident (Home-based trip VMT per resident in the city)
- Average VMT per employee (Work-based trip VMT per employee in the city)

IMPACTS AND MITIGATION MEASURES

Based on the potential transportation impacts as defined in Appendix G of the CEQA guidelines, the potential impacts of General Plan implementation were identified. Following the discussion of these impacts are the policies included in this General Plan that would fully or partially minimize these impacts.

Impact 3.14-1: General Plan implementation would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities (Less than Significant)

The Valley Transportation Authority has provided Level of Service thresholds for intersections and roadway segments since 1990s. The City of Milpitas has participated in the Countywide Congestion Management Program. The intent of the program is to reduce congestion while simultaneously improve land use decision making and air quality. While CMP intersections and roadways located within the City of Milpitas would typically be subject to LOS thresholds set forth by VTA, LOS is no longer considered an environmental impact under California State law.

The following policies focus on the development of a multimodal transportation network in Milpitas. As historically the transportation network has emphasized meeting the needs of motor vehicle transportation, these policies place an increased emphasis on the enhancement of facilities to improve walking, bicycling and transit use. These policies support and help further the implementation of a variety of City transportation plans, including the Bikeway Master Plan and the Trails Master Plan. These policies also seek to minimize the negative impacts that improvements to one mode may have on other modes. The context of the transportation network is also considered through policies that support interjurisdictional coordination and closely linking the development of transportation facilities to the surrounding land uses. Through implementation of the policies and actions included in the General Plan, and listed below, implementation of the proposed General Plan would result in a **less than significant impact**.

GENERAL PLAN MINIMIZATION MEASURES

CIRCULATION ELEMENT POLICIES

Policy CIR 1-1: Prioritize and measure infrastructure and facility safety on streets and public rights-of-way.

Policy CIR 1-2: Ensure that the City's transportation system supports planned land uses and removes barriers to all types of transportation options as envisioned in the Land Use Element.

Policy CIR 1-3: Promote interconnectivity of the transportation network in existing and new developments and actively measure the quality of conditions in neighborhoods to better understand what barriers exist in order to support use of and access to the network.

Policy CIR 1-4: Coordinate development of safe, inclusive and health-promoting transportation infrastructure with local, county, regional, and state agencies to optimize efficiency of the

transportation network for all users, and increase opportunities for physical activity for all types of users.

Policy CIR 1-5: Encourage reduced block size in new developments to develop a grid or modified grid network to enhance walkability.

Policy CIR 1-6: Continue to participate in county and regional transportation processes through VTA and MTC to facilitate interagency coordination and education, maintain awareness of programmatic and funding opportunities, and advocate for the City's interests for the community.

Policy CIR 1-7: Coordinate with neighboring jurisdictions regarding planned developments and transportation improvements that impact communities in both jurisdictions.

Policy CIR 1-8: Prioritize multi-modal infrastructure improvements that improve pedestrian, bicyclist and transit user safety and equity for inclusion in the CIP.

Policy CIR 1-9: Evaluate the impacts of development proposals and capital improvements on intersection and roadway operations using measures that may include Level of Service. Higher levels of delay may be considered acceptable at selected high activity locations where mitigations would negatively impact other transportation modes.

Policy CIR 1-11: Maintain acceptable operations for all major streets and intersections for all modes of transportation, with an emphasis on comfort and safety to increase choices for pedestrians and people who ride bicycles. Examples of multimodal evaluation considerations may include tradeoffs between addition of turn lanes and the resulting impacts to continuity of bike lanes or increases in pedestrian crossing distance and delay.

Policy CIR 1-12: Identify strategies to maximize person throughput to support the efficient and safe mobility of people, regardless of transportation mode. Approaches to achieving this may include transportation systems management (TSM), intelligent transportation systems (ITS), traffic signal coordination, and transit signal priority.

Policy CIR 1-13: Maintain up-to-date emergency preparedness and evacuation plans and procedures in coordination with appropriate state, regional, county, and local agencies and departments.

Policy CIR 2-1: Promote multimodal transportation options by developing an interconnected system of streets, roads, bridges, and highways that provides continuous, efficient, safe and convenient travel for all users regardless of mode, age or ability and encourage users to walk, ride a bicycle, or use transit for shorter, local trips.

Policy CIR 2-2: Design intersections to safely and comfortably accommodate all transportation modes and users, especially those who are disproportionately impacted by health, income, or access disparities.

Policy CIR 2-3: Seek opportunities to implement and assess traffic calming strategies that reduce vehicle speeds and establish a safer, more comfortable environment for pedestrians and bicyclists.

Policy CIR 2-4: To enhance the City's multimodal network in a cost-effective and forward-thinking manner, view all public capital improvement projects as opportunities to enhance mobility, access, health and safety for all modes of transportation, especially for those who are more vulnerable.

Policy CIR 2-5: Ensure adequate routes to meet needs of truck traffic to serve the needs for regional and local goods movement.

Policy CIR 2-6: Provide thoughtful circulation and off-street parking and loading facilities for trucks while not compromising pedestrian or bicycling access to goods and services.

Policy CIR 2-7: Provide inclusive and diverse wayfinding measures to provide directional guidance for pedestrians, bicyclists, and transit riders.

Policy CIR 3-1: Coordinate with VTA and BART to design and implement capital improvements that support safety and access to rail stations and bus stops.

Policy CIR 3-2: Coordinate transit planning and provision of transit-supportive infrastructure with Caltrans, VTA, BART, and other service providers to provide seamless service for users across transit modes and to facilitate transfers.

Policy CIR 3-3: Work with local stakeholders and VTA to ensure that paratransit services adequately meet the needs of people with disabilities in Milpitas.

Policy CIR 3-4: Ensure that all transit-supportive infrastructure, sidewalks, and bike lanes are adequately maintained to provide high-quality facilities for users.

Policy CIR 4-1: Encourage a shift to active transportation modes by expanding and enhancing current pedestrian and bicycle facilities to accommodate pedestrians and bicyclists of all ages and abilities and encourage all users to reduce vehicle trips and utilize active transportation options with an increase in density of pedestrian and bicycle-supportive infrastructure.

Policy CIR 4-2: Link and expand City pedestrian and bicycle circulation facilities to existing and planned local and regional networks, with an emphasis on expanding infrastructure options near transit.

Policy CIR 4-3: Encourage walking, biking and transit use by prioritizing and implementing "first-mile/last mile" improvements, wayfinding and educational efforts in the vicinity of the Great Mall transit center, light rail stations, the BART station, and heavily used bus stops.

Policy CIR 4-4: Provide secure bicycle parking and end-of-trip support facilities (publicly accessible lockers, changing rooms and showers) at centers of civic, retail, recreation, education, and work activity.

Policy CIR 4-5: Support building bridges or under-crossings across creek channels, railroad lines and roadways in a manner that will enhance safety, improve network connectivity, and facilitate bicycling and walking between high density residential developments, retail centers, civic buildings, and recreational centers.

Policy CIR 4-6: Eliminate gaps in the pedestrian and bicycle network, especially between neighborhoods, trails that access schools, and areas with higher health disparities.

Policy CIR 4-7: Work collaboratively with the community to discover and develop connections between the multi-use paths and the on-street bicycle system to support development of a comprehensive network, with an emphasis on areas with limited access and/or higher health disparities.

Policy CIR 4-8: Preserve and enhance the natural environment of the creek corridors in conjunction with each trail project.

Policy CIR 4-9: Identify and investigate the feasibility of trail development along rights-of-way including abandoned, unused, or active railroad corridors, utility corridors, and waterways.

Policy CIR 4-10: Work and promote an active lifestyle that encourages walking, bicycling, and utilizing the trail network to support public health while reducing greenhouse gas emissions and other air pollutants.

Policy CIR 5-1: Develop, implement, and monitor vehicle trip reduction requirements for large development projects – including all land use types – to minimize the impact of new development on traffic congestion and to reduce vehicle emissions.

Policy CIR 5-2: Adopt a citywide TDM ordinance to require and encourage vehicle trip reduction at employment sites, businesses, and multi-unit residential facilities, and hire dedicated staff to work closely with communities throughout the City on ongoing education and encouragement efforts.

Policy CIR 5-3: Encourage existing employers to adopt strategies to implement programs to reduce employee vehicle trips, including purchasing passes through VTA's annual transit pass program; providing facilities such as secure bike parking, lockers, changing rooms, and showers; telework, and flexible work schedules.

Policy CIR 5-4: Encourage developers to provide enhanced TDM programs and alternative transportation infrastructure that exceeds minimum requirements in exchange for reduced parking requirements, with a focus on priority development areas and locations in proximity to high capacity transit.

Policy CIR 5-5: Cooperate with other private entities and public agencies to promote local and regional transit serving Milpitas.

Policy CIR 6-3: Encourage walking and bicycling as strategies to promote public health and reduce the long-term transportation costs of owning and maintaining a vehicle.

Policy CIR 6-4: Prioritize transportation improvements in part based on consideration of benefits to disadvantaged communities.

Policy CIR 6-5: Include a robust, inclusive and interactive community engagement and educational process in transportation planning efforts to help ensure that project will address the needs of local stakeholders, especially disadvantaged populations.

Policy CIR 6-7: Develop impact fees to provide revenues to be used to construct pedestrian and bicycle infrastructure that will support new development.

Policy CIR 6-8: Use repaving projects as an opportunity to cost-effectively implement new bicycle facilities in accordance with City plans.

Policy CIR 6-9: Maximize efficient maintenance of transportation infrastructure of all modes, such as coordinating roadway paving or striping projects to include maintenance of pedestrian and bicycle infrastructure.

Policy CIR 7-1: Proactively position the City to be competitive in pursuing grant funding for planning, design, and construction of transportation improvements.

Policy CIR 7-2: Consider developing additional local sources of funding for trails and bikeways such as special assessment districts, nonprofit corporations and ballot initiatives.

Policy CIR 7-3: Seek opportunities to develop public/private partnerships to provide transportation infrastructure and services.

Policy CIR 7-4: Ensure that construction detour routes provide safe and convenient access for users of all modes of transportation, including people with disabilities.

Policy CIR 7-5: Monitor the development of new and emerging transportation technologies – such as autonomous vehicles – to enable the City to prepare for their incorporation into the transportation system if safe and appropriate.

Impact 3.14-2: General Plan implementation would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a) (Significant and Unavoidable)

CEQA Guidelines § 15064.3, subdivision (a) indicates that a land use project would have a less than significant impact if the vehicle miles traveled (VMT) in the project area are expected to be less than that of existing conditions. Since the proposed General Plan would allow for intensification of existing land uses, its implementation would lead to increased VMT, and further analysis of the significance of such increases is required. For the purposes of this analysis and based on the guidance provided by the Governor's Office of Planning and Research (OPR) and the Valley Transportation Authority (VTA), VMT was analyzed using efficiency metrics including the average VMT per capita generated by residents of Milpitas as well as the home-based VMT per employee generated by workers in the City of Milpitas.

Because the City of Milpitas has not yet adopted standards of significance for evaluating VMT, guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018, was used. This document indicates that a residential project generating vehicle travel that is 15 or more percent below the existing Citywide or regional residential VMT per capita may indicate a less-than-significant transportation impact. For the purposes of this analysis, the average VMT per capita resulting from buildout of the General Plan was assessed using a significance threshold based on the countywide average for Santa Clara County, which is slightly lower than Milpitas's existing VMT per capita, and therefore reflects the more rigorous of the two potential VMT thresholds.

Similarly, an employment-based project generating vehicle travel that is 15 percent or more below the baseline VMT per employee may indicate a less-than-significant transportation impact. For the purposes of this analysis, the applied VMT per employee significance threshold is based on the countywide average for Santa Clara County, similar to the approach taken by nearby jurisdictions in the County including Palo Alto, Sunnyvale, and Santa Clara. As with residential VMT per capita, the

baseline average VMT per employee at the countywide level is lower than the citywide average for Milpitas.

Within the current Santa Clara Valley Transportation Authority Travel Demand Model (interpolated to 2020 based on 2017 conditions), the City of Milpitas has an average VMT per resident of 13.51 miles, while the County of Santa Clara has an average VMT per resident of 13.33 miles. Using the lower countywide 13.33 VMT per capita as a baseline, the applied significance threshold for residential uses is 11.48 VMT per capita. Based on output from dedicated runs of the VTA travel demand model reflecting buildout of the proposed General Plan, residential uses in the City of Milpitas are projected to generate an average of 11.03 VMT per capita. Because this is below the applied significance threshold of 11.48 VMT per capita, the VMT generated by the residential development associated with the proposed General Plan would constitute a **less than significant impact**.

The VTA model as interpolated to 2020 conditions estimates that the current countywide average VMT for employment-based uses is 16.64 VMT per employee. The applied significance threshold of 15 percent below this baseline value equals 14.14 VMT per employee. Based on the custom runs of the VTA model to reflect implementation of the proposed General Plan, employment-based uses in Milpitas are projected to generate an average of 20.41 VMT per employee. Since this is above the applied significance threshold, the VMT generated by the employment-based development associated with the proposed General Plan would constitute a **significant impact**. A summary of the VMT analysis is shown in Table 3.14-1.

TABLE 3.14-3: VEHICLE MILES TRAVELED ANALYSIS

VMT METRIC	*CITY OF MILPITAS 2040 PLUP*	*2020 SANTA CLARA COUNTY BASELINE*	*THRESHOLD OF SIGNIFICANCE*	*PERCENT CHANGE*	*SIGNIFICANT IMPACT?*
Average Residential VMT per Capita	11.03	13.33	11.48	-17%	No
Average Employment VMT per Employee	20.41	16.64	14.14	+23%	Yes

SOURCE: KITTELSON & ASSOCIATES, INC., 2020

The projected VMT per employee for the City of Milpitas is nearly 31 percent higher than the applied significance threshold. The proposed General Plan land use patterns and intensities, as well as its proposed policies, include a multitude of components that will reduce VMT. Individual development projects will also be required to completed VMT analyses based on forthcoming VMT policies and thresholds to be established by the City of Milpitas, including transportation demand management (TDM) measures designed to reduce employment based VMT. While such measures are likely to result in less-than-significant VMT impacts when considered at an individual project level, they cannot be

guaranteed and are not possible to fully quantify or mitigate at a Citywide level as part of a programmatic General Plan, particularly given the 31 percent reduction needed to reach the applied significance threshold. As a result, the VMT impacts associated with employment-based uses allowed by the proposed General Plan would be considered **significant and unavoidable**.

The General Plan includes policies to reduce VMT to the extent feasible. These policies primarily reduce employment-based VMT, where the significant impacts would occur, although some policies pertain to residential VMT as well. Transportation demand management (TDM) strategies would be promoted citywide, with an emphasis on implementing measures through large employers, the setting where there is the greatest potential to reduce vehicle trips. As the primary purpose of trip reduction is to support reduced greenhouse gas (GHG) emissions, policies that focus on emissions reduction are also included below. It should be noted that numerous policies cited in the previous impact discussion above also support GHG reductions by enhancing facilities for non-vehicle modes of transportation.

GENERAL PLAN MINIMIZATION MEASURES

CIRCULATION ELEMENT POLICIES

Policy CIR 4-10: Work and promote an active lifestyle that encourages walking, bicycling, and utilizing the trail network to support public health while reducing greenhouse gas emissions and other air pollutants.

Policy CIR 5-1: Develop, implement, and monitor vehicle trip reduction requirements for large development projects – including all land use types – to minimize the impact of new development on traffic congestion and to reduce vehicle emissions.

Policy CIR 5-2: Adopt a citywide TDM ordinance to require and encourage vehicle trip reduction at employment sites, businesses, and multi-unit residential facilities, and hire dedicated staff to work closely with communities throughout the City on ongoing education and encouragement efforts.

Policy CIR 5-3: Encourage existing employers to adopt strategies to implement programs to reduce employee vehicle trips, including purchasing passes through VTA's annual transit pass program; providing facilities such as secure bike parking, lockers, changing rooms, and showers; telework, and flexible work schedules.

Policy CIR 5-4: Encourage developers to provide enhanced TDM programs and alternative transportation infrastructure that exceeds minimum requirements in exchange for reduced parking requirements, with a focus on priority development areas and locations in proximity to high capacity transit.

Policy CIR 5-5: Cooperate with other private entities and public agencies to promote local and regional transit serving Milpitas.

Policy CIR 6-2: Support development of healthier communities through support the use of lower- or non-polluting modes of transportation to reduce GHG vehicle emissions and local air pollution levels.

Impact 3.14-3: General Plan implementation would not substantially increase hazards due to a geometric design feature or incompatible use (Less than Significant)

The proposed project does not directly result in any modifications to the transportation network, it therefore has no impact in terms of potentially increasing hazards related to design features. At such time as the facilities presented in the plan are implemented, they would be required to meet applicable City, federal, and state design standards. Therefore, this results in a **less than significant** impact.

Policies presented below emphasize consideration of the needs of all transportation users, including safety as well as comfort, which may exceed minimum design requirements.

GENERAL PLAN MINIMIZATION MEASURES

CIRCULATION ELEMENT POLICIES

Policy CIR 2-2: Design intersections to safely and comfortably accommodate all transportation modes and users, especially those who are disproportionately impacted by health, income, or access disparities.

Policy CIR 2-4: To enhance the City's multimodal network in a cost-effective and forward-thinking manner, view all public capital improvement projects as opportunities to enhance mobility, access, health and safety for all modes of transportation, especially for those who are more vulnerable.

Impact 3.14-4: General Plan implementation would not result in inadequate emergency access (Less than Significant)

The proposed project would include modifications to the existing transportation network which would potentially impact emergency access response times. The proposed changes in motor vehicle infrastructure could result in increased vehicle delay at intersections as well as along roadway segments. Thus, an increase in emergency response times could occur. However, future development under the proposed plan would be subject to the requirements contained in the City's Design and Construction Standards, which include requirements for emergency access, and would be reviewed by public safety officials as part of the City's entitlement process. Thus, individual projects will adhere to City of Milpitas and Santa Clara County development codes just as they do today. Safety, Fire, and Building Codes will be adhered to for all projects included in the proposed intensification of land uses outlined in the plan.

Additionally, emergency vehicles are able to use vehicle preemption technology (where possible) and sirens to reduce their response times, and they would continue to do so regardless of any roadway capacity modification. Locations that would experience a reduction in vehicular roadway capacity 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.

The policies cited below focus on the need to consider safety needs as part of planning and implementing transportation improvements. This includes ensuring adequate mobility and access as well as coordination with adjacent jurisdictions, which are critical considerations in providing adequate emergency access. Overall, this is a **less than significant** impact.

GENERAL PLAN MINIMIZATION MEASURES

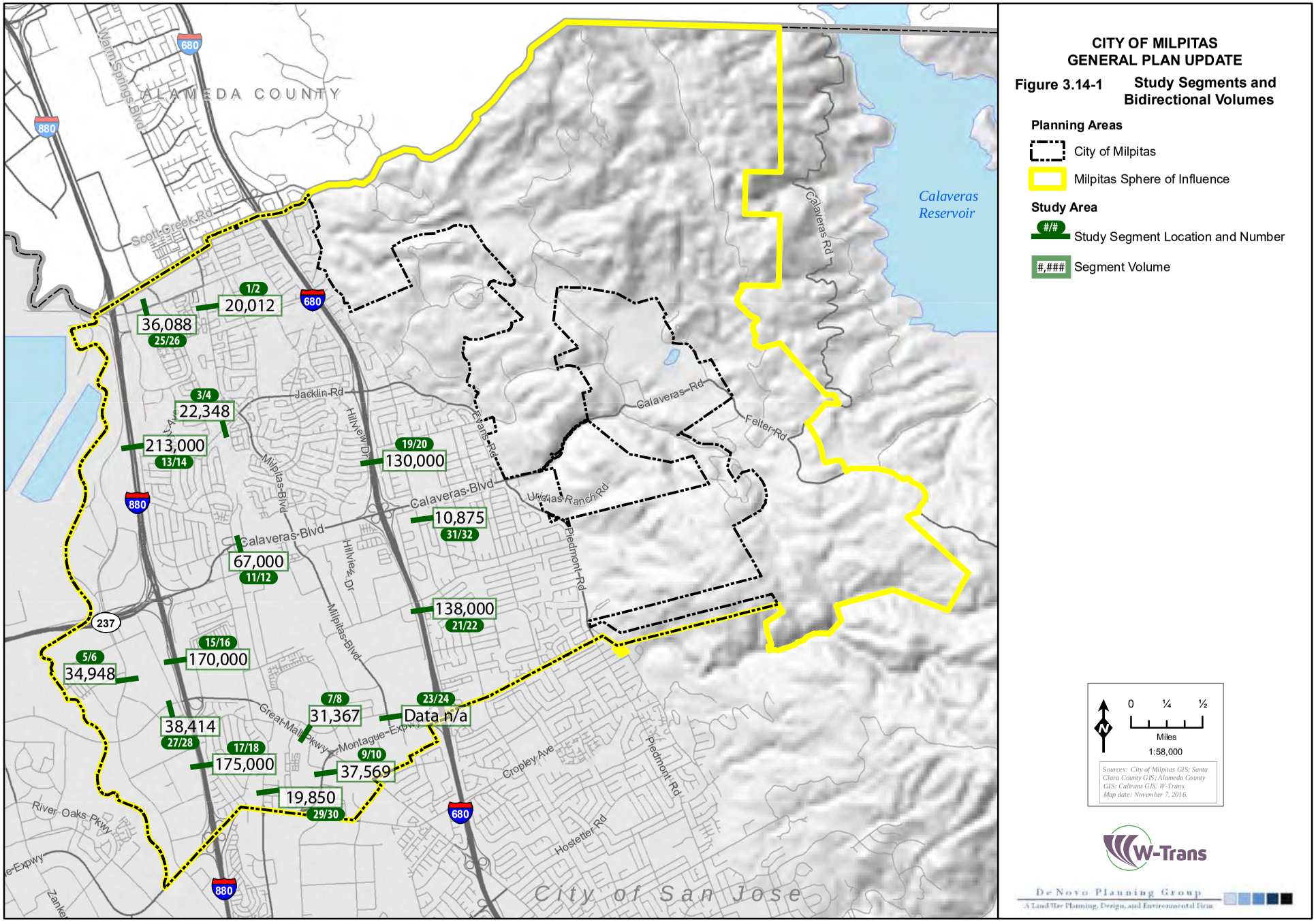
CIRCULATION ELEMENT POLICIES

Policy CIR 1-1: Prioritize and measure infrastructure and facility safety on streets and public rights-of-way.

Policy CIR 1-7: Coordinate with neighboring jurisdictions regarding planned developments and transportation improvements that impact communities in both jurisdictions.

Policy CIR 1-11: Maintain acceptable operations for all major streets and intersections for all modes of transportation, with an emphasis on comfort and safety to increase choices for pedestrians and people who ride bicycles. Examples of multimodal evaluation considerations may include tradeoffs between addition of turn lanes and the resulting impacts to continuity of bike lanes or increases in pedestrian crossing distance and delay.

Policy CIR 1-13: Maintain up-to-date emergency preparedness and evacuation plans and procedures in coordination with appropriate state, regional, county, and local agencies and departments.



CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.14-1 **Study Segments and Bidirectional Volumes**

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence

Study Area

- #/# Study Segment Location and Number
- #,### Segment Volume

0 ¼ ½ Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; Caltrans GIS; W-Trans.
Map date: November 7, 2016.

W-Trans

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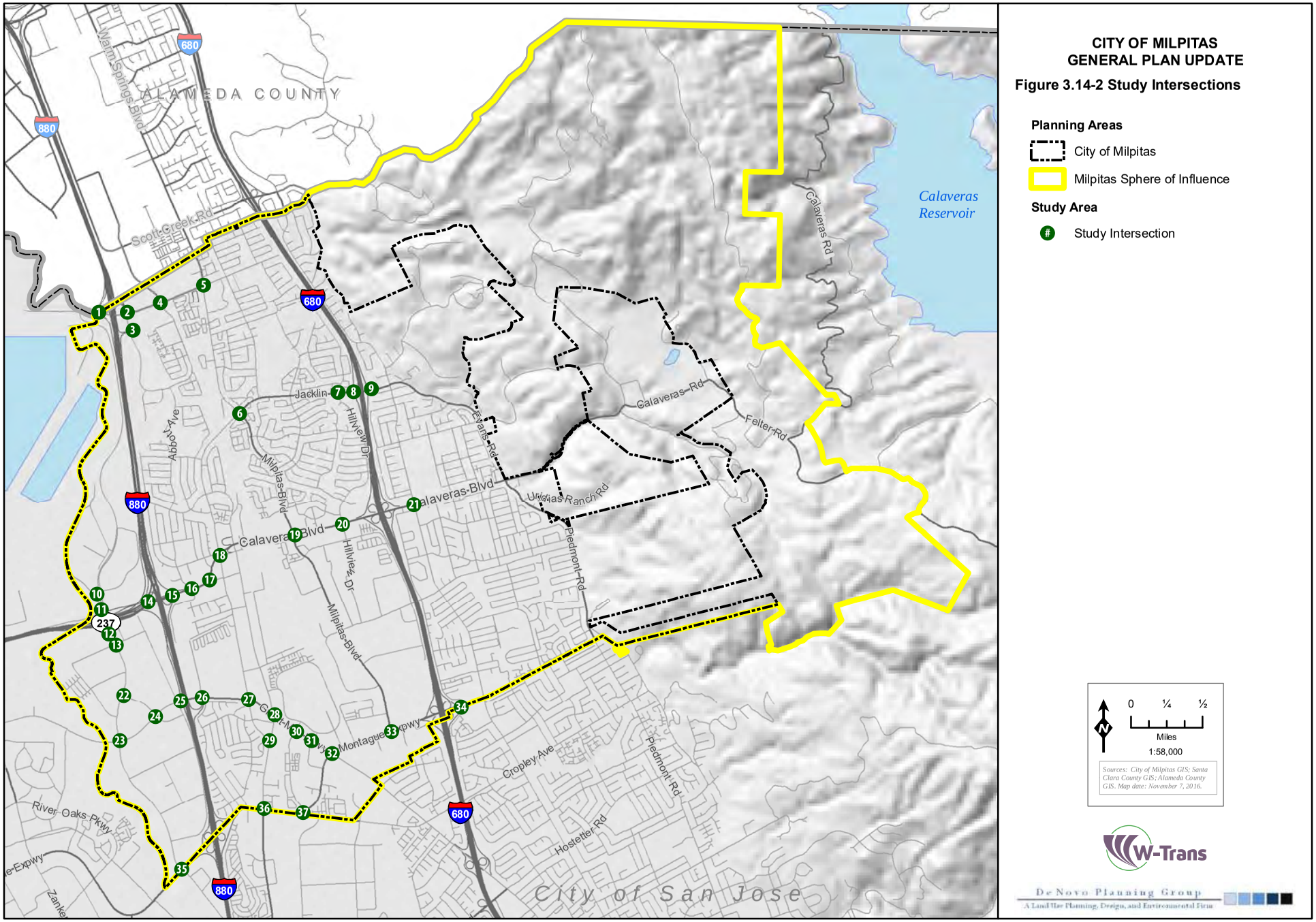
ALAMEDA COUNTY
Warm Springs Blvd
Scott Creek Rd
680
880
237
Abbott Ave
Jacklin
Hillview Dr
Milpitas Blvd
Evans Rd
Calaveras Blvd
Calaveras Rd
Felter Rd
Upulas Ranch Rd
Piedmont Rd
Montague Expwy
Cropley Ave
Hostetter Rd
River Oaks Pkwy
Calaveras Reservoir
City of San Jose
CITY OF MILPITAS
GENERAL PLAN UPDATE
Figure 3.14-2 Study Intersections
Planning Areas
City of Milpitas
Milpitas Sphere of Influence
Study Area
Study Intersection
0 ¼ ½
Miles
1:58,000
Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS. Map date: November 7, 2016.
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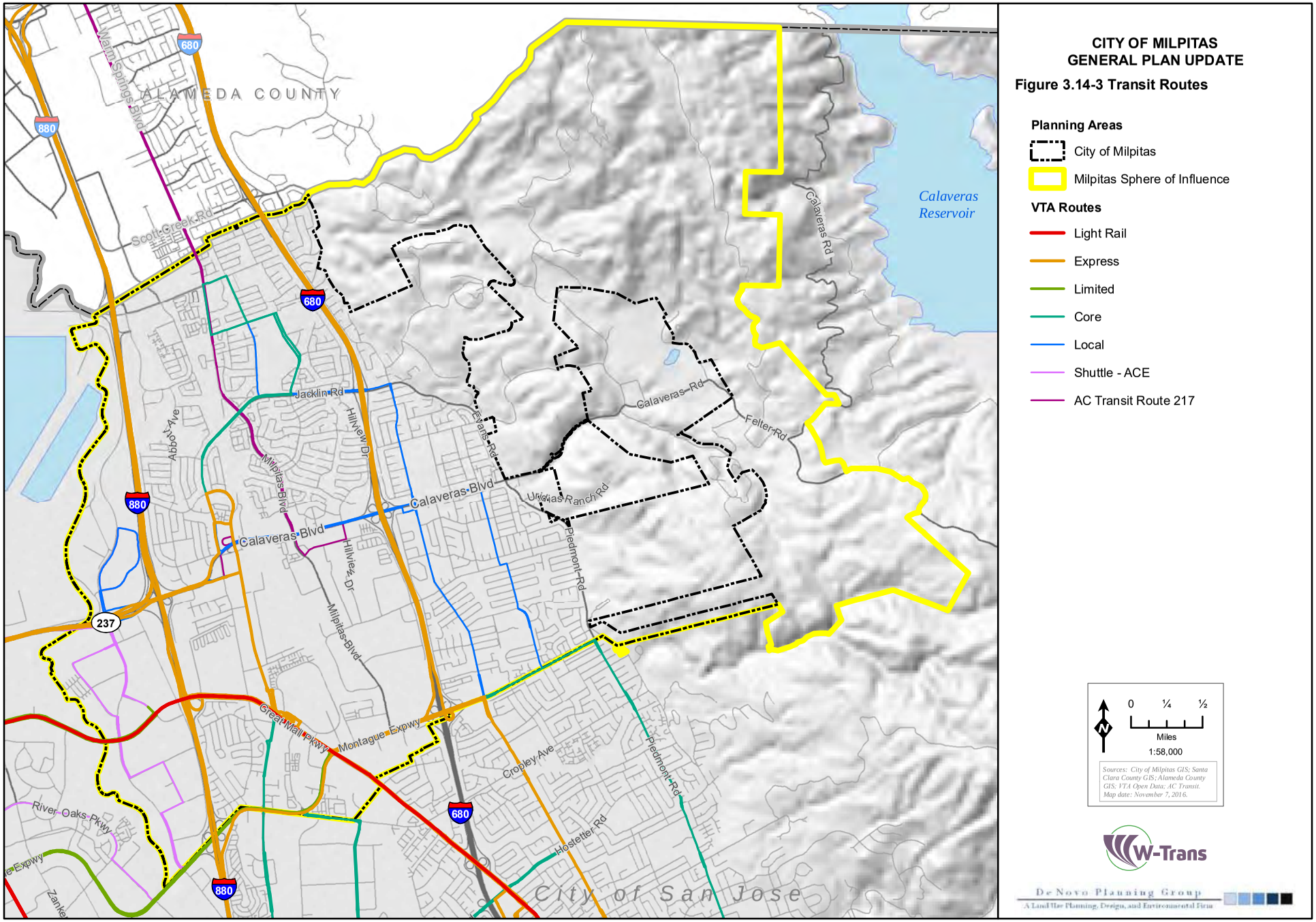

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.14-3 Transit Routes

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence

VTA Routes

- Light Rail
- Express
- Limited
- Core
- Local
- Shuttle - ACE
- AC Transit Route 217

N

0 ¼ ½

Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; VTA Open Data; AC Transit. Map date: November 7, 2016.

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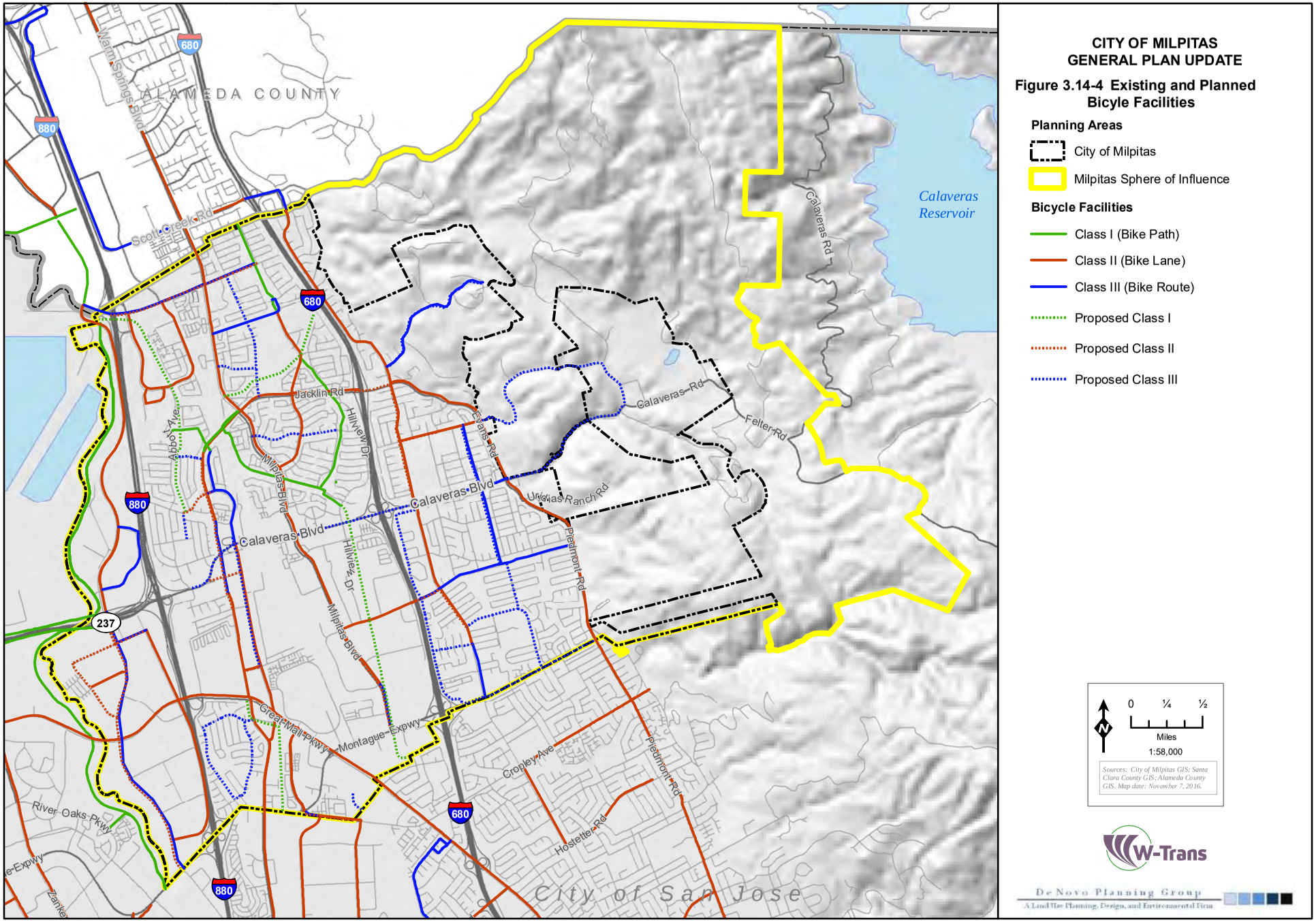

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.14-4 Existing and Planned Bicyle Facilities

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence

Bicycle Facilities

- Class I (Bike Path)
- Class II (Bike Lane)
- Class III (Bike Route)
- Proposed Class I
- Proposed Class II
- Proposed Class III

N

0 ¼ ½

Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS. Map date: November 7, 2016.

W-Trans

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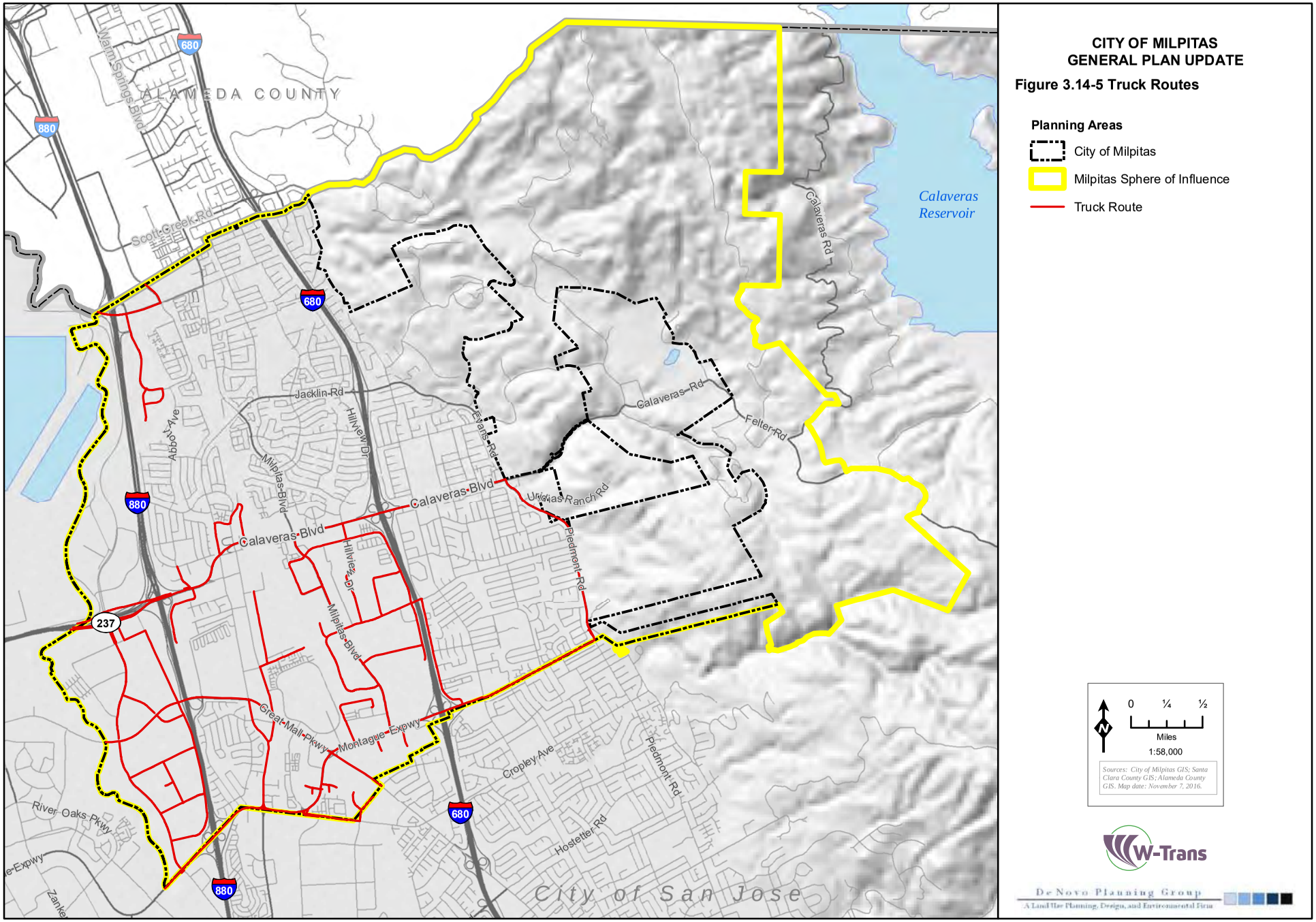

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.14-5 Truck Routes

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- Truck Route

N

0 ¼ ½

Miles

1:58,000

Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS. Map date: November 7, 2016.

W-Trans

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Utilities are critical to providing safe drinking water, disposal and treatment of wastewater (sewage), stormwater drainage, and solid waste disposal. This section provides a background discussion of the utility systems in Milpitas including water supplies, wastewater, storm drainage, and solid waste. This section is organized with an existing setting, regulatory setting, and impact analysis.

No Notice of Preparation (NOP) comments were received regarding this environmental topic.

3.15.1 WATER SUPPLIES

KEY TERMS

Acre feet: The volume of one acre of water to a depth of one foot. Each acre-foot of water is equal to approximately 325,851.4 gallons.

BGS: Below ground surface.

GPD: Gallons per day.

GPM: Gallons per minute.

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

MG: Million gallons

MGD: Million gallons per day

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is replenished naturally through precipitation, but is lost naturally through evaporation and seepage into soil.

WATER DEMANDS

The City owns, operates and maintains a potable water distribution system with more than 16,000 water service connections (Milpitas, 2011). The City's potable water system is shown on Figure 3.15-1.

The City purchases treated potable water from two wholesalers, the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD). Approximately two-thirds of the City's potable water is from SFPUC and the remaining one-third is from SCVWD (Milpitas, 2011). The City began distributing SFPUC water in 1954, the same year the City of Milpitas was incorporated. The City and SFPUC currently operate under a 25-year Water Supply Agreement, most recently signed in 2009. The potable water from SFPUC enters the City through three turnouts, located at Sunnyhills

Court, Calaveras Boulevard, and Main Street (as shown on Figure 3.15-1), with a total estimated capacity of 31 mgd.

In 1993, the City began delivering SCVWD supplies to the commercial and industrial areas of the City west of Highway 880 and south of Calaveras Boulevard west of Highway 690. These two water systems are generally separate. However, isolation valves between the service areas can provide emergency water supply from one service area to another, if needed (Milpitas, 2011).

The City's total water production in 2015 was 3,824,970 hundred cubic feet (hcf) or 2,861.27 million gallons per year. The city's water use is predominantly by residential customers. Of the over 16,000 water service accounts, approximately 12,264 are single-family residential accounts. Single-family residential use accounts for 37% of total water consumption. Commercial/institutional accounts for 18% of total water use, industrial for 16% of total water use, multi-family residential for 15% of total water use, landscape for 14% of total water use, and fire for 0.03% of total water use (City of Milpitas UWMP, 2010).

WATER SUPPLIES

WATER SUPPLIERS

The City of Milpitas has the following existing water suppliers:

- SFPUC: snowmelt from the Sierra Nevada, delivered through the Hetch Hetchy aqueducts, and treated water produced by SFPUC from its local watersheds and facilities in Alameda County; and
- SCVWD: treated surface water from the Penitencia and Santa Teresa treatment plant via the Milpitas Pipeline, which terminates in the City.

Additionally, the City of Milpitas is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA). The BAWSCA is discussed further below.

San Francisco Public Utilities Commission (SFPUC)

The City purchases wholesale water from the City and County of San Francisco's regional water system. This supply is predominantly snowmelt from the Sierra Nevada, delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by SFPUC from its local watersheds and facilities in Alameda County. On June 2, 2009, the City entered into a 25-year Water Supply Agreement with the SFPUC. This agreement affirms the City the perpetual right to purchase up to 9.23 mgd of treated potable water unless SFPUC has a water shortage.

Santa Clara Valley Water District (SCVWD)

The City began receiving treated surface water from SCVWD in August 1993 under a September 1984 contract between the City and SCVWD. The supply delivery is adjusted annually based on a binding 3-year annual delivery schedule. The City's annual purchase must be at least 90% of the delivery schedule and the City's monthly "supply guarantee" is at least 15% of the annual delivery

schedule. SCVWD provides treated water from its Penitencia and Santa Teresa treatment plant via its Milpitas Pipeline which terminates in the City.

Although the City purchases are currently limited to surface water largely purchased by SCVWD from the State Water Project and Central Valley Project, SCVWD's overall water supply comes from a variety of sources. Nearly half is from local groundwater aquifers, and more than half is imported from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. Both groundwater and imported water are sold to retailers. SCVWD also manages the groundwater basin to the benefit of agricultural users and other independent users who pump groundwater. Local runoff is captured in SCVWD reservoirs for recharge into the groundwater basin or treatment at one of SCVWD's water treatment plants. The total storage capacity of these reservoirs is about 170,000 acre-feet (AF).

In 2010, SCVWD entered into agreement with the City of San Jose to build an advanced water treatment facility (to be completed in early 2012) to produce up to 10 mgd of highly purified recycled water from treated wastewater through reverse osmosis, microfiltration, and UV light disinfection. This near distilled-quality water will be blended into existing recycled water provided by the Santa Clara/San Jose Water Pollution Control Plant's (WPCP) recycled water producer, South Bay Water Recycling (SBWR), to improve overall recycled water quality so that the water can be used for a wider variety of irrigation and industrial purposes. Longer term, SCVWD is investigating the possibility of using this highly purified recycled water for replenishment of its groundwater basins.

Bay Area Water Supply and Conservation Agency (BAWSCA)

The BAWSCA is a special district created on May 27, 2003 by Assembly Bill 2058 to represent the interests of 24 cities and water districts, and two private utilities in Alameda, Santa Clara and San Mateo counties that purchase water on a wholesale basis from the San Francisco Regional Water System. BAWSCA is the only entity having authority to directly represent the needs of the cities, water districts and private utilities (wholesale customers) that depend on the regional water system. BAWSCA enables customers of the regional system to work with San Francisco on an equal basis to ensure the water system is reliable, and to collectively and efficiently meet local responsibilities.

BAWSCA has the authority to coordinate water conservation, supply, and recycling activities for its agencies; acquire water and make it available to other agencies on a wholesale basis; finance projects, including improvements to the regional water system; and build facilities jointly with other local public agencies or on its own to carry out the agency's purposes. BAWSCA's role in the development of the UWMP update is to work closely with its member agencies and SFPUC to maintain consistency between the multiple documents being developed and to ensure overall consistency with the Water Supply Improvement Program (WSIP) and the associated environmental documents.

To fulfill its role as a water supply agency, BAWSCA is developing a "Long-Term Reliable Water Supply Strategy" to quantify the water supply needs of the BAWSCA member agencies through 2035, and identify the water supply management projects to be developed necessary to meet that need. Under evaluation are groundwater, recycled water, water transfer, surface water and new reservoir storage, desalination, expanded conservation, and localized water capture and reuse projects.

WATER SUPPLIES

The City of Milpitas has the following existing water supplies:

- Surface Water;
- Groundwater;
- Emergency Interties; and
- Recycled (Non-Potable) Water.

Surface Water

Two thirds of the water supplied to the City comes from SFPUC, of which 85 percent is derived from the Tuolumne River, through the Hetch Hetchy reservoir in the Sierra Nevada Mountains, with 15 percent originating from local surface water sources. In recent years, the City has actually purchased about 1,700 million gallons per year from SFPUC. The City's agreement with SFPUC provides the perpetual right to purchase up to 9.23 million gallons per day (mgd) of treated potable water unless SFPUC has a water shortage. On an annualized basis, the available SFPUC supply would be approximately 3,369 million gallons per year.

About one third of the City's water is supplied by the SCVWD. More than half of SCVWD's total supply, and all of its supply to the City, comes from the State Water Project (supplied by the California Department of Water Resources from State-owned storage reservoirs) and the Central Valley Project (supplied by Federal water storage under the supervision of the US Bureau of Reclamation). Treated water is supplied to the City by the SCVWD's Penitencia and Santa Teresa treatment plant via the Milpitas Pipeline. The supply delivery varies by year, based on an annual amount requested by the City on a 3-year contracted delivery schedule. For fiscal year 2016-2017, the delivery requested delivery is 119 million gallons (MG) (Milpitas, 2013). The City's annual purchase is required to be at least 90 percent of the total estimated water from the delivery schedule. Also, the City's monthly "supply guarantee" is at least 15 percent of the annual schedule for that year, meaning that in any month, the City can purchase up to 15 percent of the year's total delivery schedule water.

Groundwater

The City has two existing groundwater wells, one of which is active. The 1.7 mgd capacity Pinewood Well, located at Pinewood Park, is connected to the City's lowest water pressure zone, Zone SF1, and can supply up to 50 percent of the zone's average daily water demand. The Pinewood Well was used for approximately three months in 1991, with many complaints about taste and odor. The City plans to add onsite iron and manganese treatment to prevent future complaints.

The City also has a 1.5 mgd capacity Curtis Well, located in pressure Zone SF2, along Curtis Avenue. This well is artesian, meaning the well flows by itself, even without a pump. The well is currently inactive, but the City is preparing design drawings for a pump (to pump into the pressurized distribution system) and other improvements. When completed, the Curtis Well will be able to provide up to 50 percent of the average daily water demand of Zone SF2.

Both wells include chlorine disinfection facilities, but are solely for emergency water supply purposes. Local groundwater comes from the Santa Clara Sub-basin of the Santa Clara Valley Groundwater Basin.

Emergency Interties

As a precaution, the City entered into agreements with the San Jose Water Company (SJWC) (located south of Milpitas) in March of 1973, and with the Alameda County Water District (ACWD) (located north of Milpitas) in December of 1995 to provide emergency water with as little as two hours' notice. To date, the intertie with ACWD has been used three times to draw an emergency supply. The primary supply for the two ACWD interties is the South Bay Aqueduct. Other sources include the SFPUC and local wells (Milpitas, 2016a).

The SJWC intertie is designed to function only when the City's water distribution system pressure experiences a significant drop. The agreement allows the City to receive water from SCVWD's Penitencia Water Treatment Plant if the SJWC is not also experiencing a water supply emergency. This intertie has never been used.

Recycled (Non-Potable) Water

Recycled water is wastewater that has been treated to achieve a very high level of purity. Even though the treated water is very clean, it is not used for potable water (drinking water). The City operates and maintains a recycled water system. The system is owned by the City of San Jose South Bay Water Recycling Program (SBWR). The system has approximately 20 miles of recycled water mains and 50 water valves to serve one industrial and 180 irrigation customers in the City of Milpitas.

In addition, in July of 2014, the SCVWD opened the Silicon Valley Advanced Water Purification Center, the largest advanced water treatment plant in Northern California. Microfiltration, reverse osmosis, and ultraviolet light are used to improve up to 8 mgd of secondary treated wastewater from the San Jose/Santa Clara Water Pollution Control Plant (WPCP) to primary drinking water standards.

The source of this water is the San Jose/Santa Clara WPCP, renamed in 2013 to the San Jose-Santa Clara Regional Wastewater Facility. Treatment is provided by San Jose and Santa Clara, who are joint owners of the facility. The City of Milpitas pays a share of the capital cost of the recycled water facilities, based on the City's 14.25 mgd capacity rights in proportion to the 167 mgd total capacity of the WPCP. The City also pays a share of the operating cost, based on the volume of wastewater discharged to WPCP.

The WPCP was originally constructed in 1956 and upgraded to an advanced tertiary treatment system in 1979. Most of the final treated water is discharged to the Artesian Slough and then flows into South San Francisco Bay. About 20 percent of the treated wastewater is recycled through either the SBWR or the new Silicon Valley Advanced Water Purification Center before being sent through SBWR pipelines for landscaping, agricultural irrigation, and industrial needs throughout the South Bay.

Even though this water is treated to drinking water standards, it is not used for drinking water. Instead, the water is blended into the existing recycled water provided by the SBWR. Recycled water is further discussed in Section 3.1.2, Wastewater, below.

PROJECTED POTABLE WATER DEMANDS AND SUPPLY

In 2016, the City of Milpitas developed an UWMP Update (Milpitas, 2016a). This UWMP documented the past, current, and projected future water demands and supplies through 2040, as shown in Table 3.15-1. As shown in the table, the City's water demands are projected to increase to 7,462 MG per year (MG/year) by 2040. The City's estimated water supply is projected to increase to 9,100 MG/year by 2040. Thus, even in the year 2040, the City should have a surplus supply of 1,458 MG/year.

TABLE 3.15-1: CITY OF MILPITAS PAST AND PROJECTED WATER DEMANDS, SUPPLIES, AND SURPLUSES, MG/YEAR

	ACTUAL 2015	*PROJECTED 2020*	*PROJECTED 2025*	*PROJECTED 2030*	*PROJECTED 2035*	*PROJECTED 2040*
Potable Demand[a]	2,836	3,648	4,428	5,218	5,992	6,766
Recycled Water Demand[b]	279	375	650	719	805	875
Total Demands[b]	*3,115*	*4023*	*5078*	*5,937*	*6,797*	*7,642*
SFPUC Supply[c]	1,723	3,369	3,369	3,369	3,369	3,369
SCVWD Supply[c]	1,136	1,465	1,917	2,373	3,030	3,030
Groundwater Supply[c]	0	913	1,168	1,825	1,825	1,825
Recycled Water Supply[c]	277	375	650	719	805	875
Total Supply	*3,136*	*6,121*	*7,104*	*8,287*	*9,029*	*9,100*
Surplus[d]	0	2,098	2,026	2,349	2,232	1,458

NOTES:

[a] POTABLE WATER DEMAND PROJECTIONS FROM MILPITAS, 2015, TABLE 4-2. 2015 POTABLE WATER DEMAND FROM TABLE 4-1.

[b] RECYCLED WATER DEMAND PROJECTIONS AND TOTAL WATER DEMAND PROJECTIONS FROM MILPITAS, 2015, TABLE 4-3.

[c] SUPPLY PROJECTIONS FROM MILPITAS, 2015, TABLE 6-9. 2015 SUPPLY PROJECTION FROM TABLE 6-8.

[d] SURPLUS PROJECTIONS FROM MILPITAS, 2015, TABLE 7-2.

SOURCE: WEST YOST, OCTOBER 2016.

The estimated potable water demand for the City is based on 2009 Urban Water Management Plan (RMC, 2009a), in turn based on the water use factors developed in the 2002 Water Master Plan. Updates to the planned growth and additional water recycling are reflected, but recent conservation measures undertaken in response to Statewide drought and the Governor's mandatory demand factor reductions are not. Therefore, the estimates shown in the table above may be conservative.

The City's contract with SCVWD is renewed annually, with a varying amount of supply available from year to year. In addition, the amount of recycled water available from the SBWR is limited by the City's ability to use and distribute the recycled water (up to 14.25 mgd capacity), and the cost to do so. Thus, while the demand supplied to the City in the future may vary in its origin, supply appears to be reliable throughout the planning horizon, even in dry periods.

In addition to the City's efforts, regional suppliers are constantly focused on maintaining their supplies and reliability. As an example of regional opportunities, in the future, SCVWD's Silicon Valley Advanced Water Purification Center and its distribution system may be used to recharge the groundwater aquifer with its tertiary treated effluent.

WATER DISTRIBUTION SYSTEM

Wholesale potable water from SFPUC enters the City through three turnouts at Sunnyhills Court, Calaveras Boulevard, and Main Street (as shown on Figure 3.15-1), with a total estimated capacity of 31 mgd. Up to 14.4 mgd from SCVWD can enter the City via a turnout at Gibraltar Drive. The full distribution system supplies up to 45.4 mgd of treated water to approximately 16,000 service connections throughout the City through 245 miles of water mains.

The City's potable water distribution facilities consist of the following components (Milpitas, 2011):

- 4 Turnouts;
- 5 Reservoirs (water tanks);
- 2 Emergency Wells (1 active and 1 soon to be active);
- 3 Emergency Interties;
- 5 Booster Pump Stations;
- 41 Isolation Valves; and
- 16 Pressure Regulating Valves.

Elevations in the distribution system range from sea level at the valley floor to 2,600 feet near Monument Peak. Because of the City's topography, the water pressure varies at various locations. The distribution network is divided by elevation with six pressure zones created to allow water to flow from their perspective turnout stations and storage reservoirs to their zone of services. The SFPUC supply is distributed to four pressure zones. The SCVWD supply is distributed to two pressure zones in the valley floor area using pumps and pressure reducing systems with booster pumps providing water to the higher hillside elevations.

MAJOR WATER SYSTEM ISSUES AND OPPORTUNITIES

In March 2015, the City completed a Water Supply Augmentation Feasibility Report (Water Solutions, 2015). The Report summarized an extensive effort to identify the most cost effective ways to increase both water supply and reliability. The greatest opportunities included additional groundwater wells, an expansion of the existing recycled water supply delivery and treatment infrastructure, and continued conservation efforts.

The City plans to construct treatment and operational improvements at Pinewood Well in the near future, and to complete the Curtis Well in the next three years. For customer acceptance, existing mineral, taste, and odor concerns at Pinewood Well would need to be addressed before introduction into the distribution supply. The Water Supply Augmentation Feasibility Report recommends in-pipe blending of the well water with imported treated surface water supplies to address these issues. The blending system would require the addition of a small booster pump. Additionally, a non-operational diesel drive at the Pinewood Well requires repair. The Curtis Well

requires a well pad, submersible pump, downhole piping, submersible electrical cables, pump house, chlorine injection, treatment filters, and other components to be made operational. Testing, permitting, and regulatory compliance would also need to be addressed prior to operation of Curtis Well. Constructing additional wells has also been considered by the City to achieve a potential groundwater capacity of 8.2 mgd.

Recycled water has the potential to provide a supply limited only by treatment and distribution capacity. As such, the Water Supply Augmentation Feasibility Report focused on the need to prioritize these improvements. Extending the distribution system to incorporate loops will increase both reliability and potential market for recycled water. Physical improvements at the treatment plant could increase the percentage of the effluent (treated wastewater) that is recycled well beyond the current 10 percent.

Because of the City's significant conservation efforts, the 2015 daily per capita water use was 107 gallons per person per day, which is below both the 2015 10-percent interim goal (targeting usage of 159 gallons per capita per day), and the 2020 20-percent target reduction in usage (146 gallons per capita per day) specified in California's 2009 Water Conservation Act (Milpitas, 2016a), and is among the lowest usage in the Bay Area. As identified in the Water Supply Augmentation Feasibility Study, the City plans to install smart meters to further their conservation efforts.

REGULATORY SETTING – WATER SUPPLIES

STATE

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund ("SRF") and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

Consumer Confidence Report Requirements

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An "urban water supplier" is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier's water demand management measures. The urban water supplier 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 Department of Water Resources must receive a copy of an adopted urban water management plan.

Senate Bill (SB) 610 and Assembly Bill (AB) 901

The State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill (SB) 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of

availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

LOCAL

City of Milpitas Urban Water Management Plan (2015)

The purpose of the 2015 Urban Water Management Plan (UWMP) is to ensure efficient use of urban water supplies in the City of Milpitas and promote conservation. The UWMP discusses not only the availability of water but also water use, reclamation, and water conservation activities. The UWMP complies with the Urban Water Management Planning Act (UWMP Act) (California Water Code [CWC] Section 10610 et seq.), the Water Conservation Act of 2009 (CWC Section 10608), and the 20x2020 Water Conservation Plan, which are being implemented by the California Department of Water Resources (DWR).

City of Milpitas Water Master Plan Update (2009)

The City's 2009 Water Master Plan includes a summary of the City's system-wide water demands, the planning criteria used to determine water system demands, the City's water distribution system model, an analysis of the City's water system, and a summary of existing and future water system facilities. The City's 2020 Water Master Plan Update (2020 WMPU) is currently in progress.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact on the environment associated with Utilities if it will:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects; and/or
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-1: General Plan implementation would result in sufficient water supplies available to serve the City and reasonably foreseeable future development during normal, dry and multiple dry years (Less than Significant)

Implementation of the General Plan would result in increased population and employment growth within the Planning Area, and a corresponding increase in the demand for additional water supplies. As described in Chapter 2.0, buildout of the General Plan could yield a total of up to 33,401 housing units, a population of 113,530 people, 47,807,536 square feet of non-residential building square footage, and 84,333 jobs within the Planning Area. As shown in Table 2.0-3 of Chapter 2.0, this represents development growth over existing conditions of up to 11,186 new housing units, 37,473 people, 19,729,648 square feet of new non-residential building square footage and 36,795 jobs.

The City's 2015 UWMP documents 2015 and projected future water demands and supplies through 2040, as shown in Table 3.15-1. The City of Milpitas is currently preparing the 2020 Water Master Plan (WMPU).

Buildout potable water demands were estimated based on water use factors (WUFs) recommended in the 2020 WMPU. These water use factors (WUFs) represent typical water use for each General Plan Land Use (GPLU) designation and were developed from actual consumption data for calendar year 2019.

Applying the recommended WUFs to the GPLU designation of the plan area yields a total water demand of approximately 13.1 million gallons per day (mgd) (14,700 acre-feet per year (af/yr)). This includes an 8 percent adjustment for unaccounted-for water (UAFW), which is consistent with the 2020 WMPU.

Because the Midtown and Transit Area are unique mixed-use planning areas, no applicable WUF could be developed from existing consumption data. Instead, these demands were estimated by splitting each planning area into land use-specific components and then applying the corresponding WUF to that component area. This process was coordinated closely with the City and HydroScience to ensure consistency for the Master Plan updates.

The 2020 WMPU projects buildout potable water demands to be approximately 13.7 mgd. The 2020 WMPU demand was estimated by starting with the 2019 water demand and adding the water demand estimated for the future growth areas. This "Growth Area" estimate compares very closely (within 4.4 percent) with the GPU land use-based water demand of 13.1 mgd.

The City will have adequate water supply to serve the buildout GPU land uses. Per the 2015 Urban Water Management Plan (UWMP), the City projects combined supplies from the San Francisco Public Utilities Commission (SFPUC) and Valley Water (VW) to be approximately 14.5 mgd in 2025. By 2040, the buildout time horizon in the 2020 WMPU, combined SFPUC and VW supplies are projected to be over 17.5 mgd. Thus, the available water supply of 17.5 mgd exceeds the estimated

buildout water demands (13.1 mgd per the land use-based method and 13.7 mgd per the 2020 WMPU).

When the net impact to potable water demand is compared to the supply available, it can be seen that the city has ample water supply to account for buildout of the proposed General Plan. As such, this is a **less than significant** impact, and no mitigation is required.

The proposed General Plan includes a range of policies designed to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. Given that projected water demands associated with General Plan buildout would not exceed the projected available water supplies, and that the proposed General Plan includes a comprehensive set of goals and policies to ensure an adequate and reliable source of clean potable water, impacts associated with water supplies are **less than significant.** The policies listed below would further assist in ensuring that adequate water supplies are available to serve new growth projected under the proposed General Plan.

GENERAL PLAN MINIMIZATION MEASURES

UTILITIES AND COMMUNITY SERVICES POLICIES

Policy UCS 2-1: Ensure the water system and supply adequately meets the needs of existing and future development and is utilized in a sustainable manner.

Policy UCS 2-2: Ensure safe drinking water standards are met.

Policy UCS 2-3: Pursue additional water supply sources to supplement the City's existing supply as needed to meet projected future demand.

Policy UCS 2-4: Ensure that all new development provides for and funds its fair share of the costs for adequate water distribution, including line extensions, easements, and dedications.

Policy UCS 2-5: Reduce potable water use and increase water conservation.

Policy UCS 2-6: Encourage the use of recycled water for industrial uses and landscape irrigation where feasible, within the parameters of State and County Health Codes and standards and in compliance with regional agency requirements.

Policy UCS 2-7: Maintain existing groundwater wells as a source of emergency water supply and a resource for supplemental supply.

Policy UCS 2-8: Maintain water interties with the San Jose Water Company (SJWC) and Alameda County Water District (ACWD) for emergency water supply.

UTILITIES AND COMMUNITY SERVICES ACTIONS

Action UCS 2a: Periodically review and update the City's Water Master Plan and Urban Water Management Plan in order to meet regulatory requirements and to ensure the documents address existing and projected demand.

Action UCS 2b: Continue to maintain, and periodically review and renew, Water Supply Agreements with the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD). The Water Supply Agreements shall provide for adequate supplies to meet the 20-year General Plan buildout projections for the City.

Action UCS 2c: Regularly review and update the City's water conservation measures to be consistent with current best management practices for water conservation, considering measures recommended by the State Department of Water Resources, the California Urban Water Conservation Council, and the Bay Area Water Supply and Conservation Agency.

Action UCS 2d: Continue to assess a water development fee on all new commercial, industrial, and residential development sufficient to fund system-wide capacity improvements. The water development fee schedule shall be periodically reviewed and revised as necessary.

Action UCS 2e: Continuously monitor water flows through the City's water system to identify areas of potential water loss and instances of under-billing for water services, and make improvements to the system and billing assessments as necessary.

Action UCS 2f: Require, as a condition of project approval, dedication of land and easements, or payment of appropriate fees and exactions, to help offset municipal costs of expansion of water conveyance and delivery systems.

Action UCS 2g: Periodically review and update the City's water conservation ordinance in order to ensure effective and ongoing water conservation efforts.

Action UCS 2h: Continue to implement a remote monitoring program for the City's water system and replace malfunctioning City meters in the system as necessary. The City will continue the practice of identifying and replacing faulty meters at service connections on an ongoing basis.

Action UCS 2i: Regularly monitor water quality of the water system and implement necessary measures to remain in compliance with local, state, and federal safe drinking water standards.

Action UCS 2j: Aggressively pursue expansions to the treatment and distribution capacity of recycled water supplies and coordinate with the City of San Jose South Bay Water Recycling Program to increase recycled water supplies available to Milpitas.

Action UCS 2k: Continue to receive treated recycled water supplies from the San Jose-Santa Clara Regional Wastewater Facility, and explore opportunities to increase delivery volumes once demand exceeds supply, and adequate distribution infrastructure is in place.

Impact 3.15-2: General Plan implementation may require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

Development and growth in the City under the proposed General Plan would result in increased demand for water supplies, including water conveyance and treatment infrastructure. The proposed General Plan includes policies and actions to ensure that water supplies are provided at acceptable levels and to ensure that development and growth does not outpace the provision of available water supplies.

As described under Impact 3.15-1, the projected 2040 water supplies are adequate to meet demand that would be generated by buildout of the General Plan. As such, implementation and buildout of the General Plan would not result in the need to construct or expand water supply and treatment facilities that have not already been described and accounted for in the Districts' relevant water master plans, which include the 2015 UWMP.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The proposed General Plan includes a range of policies (listed above) to ensure that water providers serving the city are consulted with during future land use changes in order to ensure that future supply levels meet demands.

Future development in the Planning Area would be required to connect to existing water distribution infrastructure in the vicinity of each site, pay the applicable water system connection fees, and pay the applicable water usage rates. Future projects may be required to implement site specific and limited off-site improvements to the water distribution system in order to connect new project sites to the existing water infrastructure network. The specific impacts of providing new and expanded waster distribution infrastructure cannot be determined at this time, as the General Plan does not propose or authorize any specific development projects or include details on any future development projects. However, any future improvements to the existing water distribution infrastructure would be primarily provided on sites with land use designations that allow for urbanized land uses, and the environmental impacts of constructing and operating the new water distribution infrastructure would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the proposed General Plan. Therefore, this impact is considered **less than significant** and no additional mitigation is necessary.

3.15.2 WASTEWATER

KEY TERMS

Effluent: Effluent is an outflowing of water from a natural body of water, or from a man-made structure. Effluent in the man-made sense is generally considered to be water pollution, such as the outflow from a sewage treatment facility or the wastewater discharge from industrial facilities. In the context of waste water treatment plants, effluent that has been treated is sometimes called secondary effluent, or treated effluent.

NPDES: Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

WWTP: Wastewater treatment plant. Treatment of wastewater may include the following processes: screening to remove large waste items; grit removal to allow sand, gravel, and sediment to settle out; primary sedimentation where sludge can settle out of the wastewater; secondary treatment to substantially degrade the biological content of the sewage; tertiary treatment to raise the quality of the effluent before it is discharged; and, discharge.

WASTEWATER TREATMENT

The City's current sanitary sewer system, the San Jose/Santa Clara WPCP, the SBWR, and the Silicon Valley Advanced Water Purification Center (SVAWPC) are discussed below.

CITY SEWER SYSTEM

The City of Milpitas comprises 13 square miles of residential, commercial, industrial, agricultural, and recreational land uses, with a residential population of just over 76,000 people. The City's sewer utility is a self-supporting enterprise. Revenues derived from sewer rates and other sources, including reserves, is sufficient to cover all operating and capital expenditures each year. The City's rate structure requires each customer or class to pay sewer rates in proportion to the cost of service received. Milpitas customer rates are allocated based on estimated wastewater flows and strengths. The sewer enterprise maintains four separate funds including the Sewer, Sewer Capital Improvement, Treatment Plant Construction, and Sewer Infrastructure Funds. Each of these funds is treated as a separate accounting entity. The City aims to balance its budgets each year. Fund reserves generated in surplus years are typically used to make up any revenue shortfalls in deficit years.

SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY (RWF)

Currently, all wastewater collected from the City is treated at the RWF, which has a wastewater treatment capacity of 167 mgd. Current flows to the plant are approximately 110 mgd (San Jose,

2015a). The RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 2-3), Saratoga, Campbell, Los Gatos, Monte Sereno (via the West Valley Sanitation District), Santa Clara, Milpitas, and Cupertino. The RWF's treatment capacity is allocated to each tributary agency on the basis of the peak five-day dry weather flow, also referred to as the peak week flow. The City recently purchased an additional 1.0 mgd of capacity at the plant from West Valley Sanitation District and 0.75 mgd of capacity from Cupertino Sanitary District to bring the City's total contracted peak week flow capacity at the plant to 14.25 mgd. The 2015 peak dry weather flow to the plant was 96.15 mgd, with 6.71 mgd attributed to the City (San Jose, 2015b).

TABLE 3.15-2: 2015 SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY FLOWS AND AVAILABLE CAPACITIES

AGENCY	2015 PLANT CAPACITY, MGD	2015 PEAK WEEK FLOW, MGD	AVAILABLE CAPACITY, MGD
San Jose	108.89	61.18	47.71
Santa Clara	22.94	12.89	10.05
West Valley Sanitation District	11.70	10.26	1.44
Cupertino Sanitary District	7.85	3.9	3.95
City of Milpitas	14.25	6.71	7.54
County Sanitation District 2-3	0.98	0.98	0.00
Burbank Sanitary District	0.40	0.24	0.16
Total	167.00	96.15	70.85

SOURCE: WEST YOST, OCTOBER 2016.

All of the wastewater generated in the City of Milpitas' Sewer Service Area is treated at the RWF. The RWF location, just west of Milpitas and north of San Jose on the San Francisco Bay, is shown on Figure 3.15-2 and includes the following major processes/facilities (San Jose, 2016):

- Headworks and Grit Chambers – The screening facilities remove the larger trash and grit from the raw wastewater. The wastewater enters the headworks in sewers that are buried underground, and the headworks area is also below the ground level. From the headworks, the wastewater is pumped into pipes that flow to the primary settling tanks.
- Primary Settling Tanks – These tanks allow finer sediment to settle out of the effluent and skim fats, oils, and grease from the top. The treatment occurs over an hour-long period and results in effluent that is 50 percent cleaner than the raw wastewater entering the RWF. Wastewater leaving the settling tanks is called primary effluent, and flows to the aeration and clarification system.
- Aeration and Clarification – The aeration tanks pump air into the wastewater to increase the growth of bacteria and other micro-organisms that consume organic waste. These bacteria and micro-organisms then settle out of the wastewater in the clarifiers. The flow leaving the clarifiers is called secondary effluent, and it is 95 percent cleaner than the raw wastewater entering the RWF. At this point, the majority of secondary treated effluent continues to tertiary treatment (filters), while around 7 percent is diverted to the new SVAWPC.

- Filters – The filters remove small suspended solids from the secondary effluent. Flow from the filters goes to the Chlorine Contact Basin.
- Chlorine Contact Basin – This basin uses chlorine to kill any remaining viruses and bacteria. The chlorine is then neutralized to protect aquatic life in the receiving water (Coyote Creek). Effluent leaving the Chlorine Contact Basin is called tertiary effluent and is 99 percent cleaner than wastewater entering the RWF.
- Distribution – The ultimate disposal of the fully treated effluent is divided, with 90 percent piped to the outfall channel leading to Coyote Creek and then into the South San Francisco Bay, while 13 percent flows to the SBWR system.
- Solids Treatment – The bacteria and micro-organisms that settle out of the wastewater in the clarifiers are called the solids. Flotation thickeners, digesters, lagoons, and drying beds are used to extract liquid from the solids. The liquid is returned to the primary settling tanks. The remaining solids are treated in a digester that stabilizes the solids. The stable solids are then dried in the sun and trucked to the Newby Island Landfill to be used as daily cover. The full solids handling process takes over 3½ years to complete.

SOUTH BAY WATER RECYCLING PLANT (SBWR)

Approximately 13 percent of tertiary treated effluent from the RWF goes directly to the adjacent SBWR main pump station, which delivers an annual average of 10.6 mgd to over 750 recycled water customers in San Jose, Santa Clara, and Milpitas. End users in the City of Milpitas primarily include City irrigators and industrial users. The plant is administered by the City of San Jose and the system comprises a north-south artery across San Jose and an east-west artery from mid-Milpitas south through the eastern side of Santa Clara. These main arteries feed extension pipelines to reach various customers. The system includes (San Jose, 2016):

- 140 miles of pipeline;
- 5 pump stations; and
- 3 above-ground storage reservoirs that together have a storage capacity of 9.5 MG.

Potential demand for recycled water has been estimated by the South Bay Water Recycling Report (RMC, et al., 2014) as 2,200 acre-feet per year in the long term.

SILICON VALLEY ADVANCED WATER PURIFICATION CENTER

Beginning in March of 2014, the RWF began supplying secondary treated wastewater to the SVAWPC, which in turn purifies the water with the following technologies (SCVWD, 2016) before being sent to the SBWR to blend with their supply and enhance water quality to SBWR's customers:

- Microfiltration – an initial filtration process where water is pumped through tubes filled with tiny membranes. Solids, bacteria, protozoa, and some viruses are removed from the water as it is drawn through the tubes.
- Reverse Osmosis – water is forced under high pressure through membranes that remove constituents such as salts, viruses, and most contaminants, including pharmaceuticals, personal care products, and pesticides.
- Ultraviolet Light – ultraviolet light breaks down trace organic compounds in a powerful disinfection process that creates water of very high quality.

The plant has a capacity of 8 mgd and is currently considered a demonstration project with future expansion expected.

WASTEWATER FLOWS

Wastewater flows are typically evaluated for several conditions, including the following:

- Average Dry Weather Flow (ADWF) is the highest five-weekday period from June through October.
- Average Dry Weather Influent Flow (ADWIF) is the highest five-weekday period from June through October.
- Average Dry Weather Effluent Flow (ADWEF) is the lowest average Effluent flow for any three consecutive months between the months of May and October

The City's most recent Sewer Master Plan Update (RMC, 2009b), was based on revisions to projected land use including 19 General Plan Amendments throughout the City and the Milpitas Transit Area Specific Plan. These updates reflect conversion of existing land use types to higher density multi-family residential that will produce a significant increase of sewer flows and necessitate capital improvements to convey the increased flows. The Sewer Master Plan Update also reflected changes in the contributions of large water users, which are expected to decrease.

As part of the Sewer Master Plan Update, modeling of the City's sewer system was performed. The three land use categories projected to contribute most significantly to future demand are listed below, with percentages that each contributes to the overall increase.

1. Residential – increasing by approximately 3,150 acres (41 percent);
2. Industrial – increasing by approximately 1,281 acres (21.2 percent); and
3. Commercial – increasing by approximately 450 acres (7.5 percent).

WASTEWATER COLLECTION SYSTEM

As noted previously, the City of Milpitas comprises 13 square miles of residential, commercial, industrial, agricultural, and recreational land uses, with a residential population of just over 76,000 people. The City' owns and operates its own collection system, including 17,000 main sewer connections, 175 miles of gravity pipe, 5 miles of force main, and two pump stations. The Venus Pump Station, with a capacity of 1.6 mgd, serves around 1,200 homes in the low-lying Pines Neighborhood. The Main Sewer Station has a capacity of 45 mgd, which pumps sewage through 2.5 miles of dual force main to the RWF. (Milpitas, 2014). The City's sewer facilities are shown on Figure 3.15-2.

PLANNED FUTURE INFRASTRUCTURE

Recommendations in the 2014 Sewer System Master Plan (RMC, 2009b) for system improvements included collection system capacity improvements necessitated by the higher density Transit Area Specific Plan and the 19 General Plan Amendment land uses. In September 2008, the Milpitas City Council adopted a Transit Area Development Impact Fee to pay for these improvements. Some of

these improvements have already been completed, including construction of the City's Main Lift Station Replacement project (which increased capacity to 45 mgd), and rehabilitation of the Venus Pump Station which was completed in the spring of 2009 (which increased capacity to 1.6 mgd).

Additional collection system projects the City plans to complete in the future are primarily focused around sewer system replacements and upgrades. The City experiences very few sewer system overflows. Operational deficiencies are typically due to structural settlement, such as sewer pipe sags. In the past, the City's video inspection program has confirmed that many sewer lines have structural deficiencies. Currently, improvements are prioritized based on the results of the hydraulic modeling effort of the Sewer Master Plan Update. The required improvements are included in the City's Capital Improvement Plan.

The RWF has been in operation since 1956 and aging pipes, pumps, concrete and electrical systems are all in need of immediate and long-term improvements to ensure current and future needs are met. The 2013 Wastewater Treatment Plant Master Plan (San Jose, 2013) indicates the cost of capital improvements through 2040 will be $2.2 billion. Despite a steady increase in the population served by the RWF, influent wastewater flows have decreased over the past 15 years due to the loss of industry and increased water conservation. This same trend is common throughout the Bay Area. However, flows are expected to increase in the future as new homes are built to house the 400,000 new residents in San José over the next 30 years. While the RWF has over 70 mgd of remaining capacity, it is expected to reach capacity between 2035 and 2040, according to the Wastewater Treatment Plant Master Plan (San Jose, 2013).

Treatment capacity consists of four components: flow, biochemical oxygen demand (BOD), suspended solids, and ammonia. As increasing capacity is needed, the City has four options to meet the need including:

- Purchase of additional capacity as the treatment plant is expanded.
- Purchase rights to use excess capacity held by other tributary agencies.
- Adopt mutual agreements with other tributary agencies for use of excess capacity when needed.
- Pursue other regional solutions.

The City's 2009 purchase of treatment capacity from Cupertino Sanitary District included 0.75 mgd of RWF capacity, bringing Milpitas' total available treatment capacity to 14.25 mgd of flow, suspended solids, and ammonia capacity. Because Cupertino Sanitary District did not have excess BOD treatment capacity available, the City acquired three of the four treatment components. The City plans to monitor their wastewater flow and procure adequate BOD treatment capacity as needed (Milpitas, 2014).

REGULATORY SETTING - WASTEWATER

STATE

State Water Resources Control Board/Regional Water Quality Control Board

In California, all wastewater treatment and disposal systems fall under the overall regulatory authority of the State Water Resources Control Board (SWRCB) and the nine California Regional Water Quality Control Boards (RWQCBs), who are charged with the responsibility of protecting beneficial uses of State waters (ground and surface) from a variety of waste discharges, including wastewater from individual and municipal systems. The City of Milpitas falls within the jurisdiction of the San Francisco Bay RWQCB.

The RWQCB's regulatory role often involves the formation and implementation of basic water protection policies. These are reflected in the individual RWQCB's Basin Plan, generally in the form of guidelines, criteria and/or prohibitions related to the siting, design, construction, and maintenance of on-site sewage disposal systems. The SWRCB's role has historically been one of providing overall policy direction, organizational and technical assistance, and a communications link to the State legislature.

The RWQCBs may waive or delegate regulatory authority for on-site sewage disposal systems to counties, cities or special districts. Although not mandatory, it is commonly done and has proven to be administratively efficient. In some cases this is accomplished through a Memorandum of Understanding (MOU), whereby the local agency commits to enforcing the Basin Plan requirements or other specified standards that may be more restrictive. The RWQCBs generally elect to retain permitting authority over large and/or commercial or industrial on-site sewage disposal systems, depending on the volume and character of the wastewater.

LOCAL

City of Milpitas Sewer Master Plan Update (2009)

The City's 2009 Sewer Master Plan includes a description and maps of the City's wastewater collection system, system-wide flow projections, hydraulic models of system flows, an analysis of the system's capacity, a summary of system capacity improvements that are needed, and a summary of the current related CIP schedule and costs for wastewater system improvements.

City of Milpitas Sewer System Management Plan (2014)

In May 2006, the State Water Resources Control Board (SWRCB) implemented Order No. 2006-0003-DWQ. Any municipality that owns or operates a sanitary sewer system greater than 1.0 mile in length and that collects and/or conveys untreated or partially treated wastewater to publicly owned treatment plants in the State of California is required to comply with the terms of this order. This order requires the development and implementation of a system-specific Sanitary Sewer Management Plan (SSMP). The City's SSMP facilitates the overall management of the City of Milpitas' sewer system.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it would:

- Require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects; and/or
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-3: General Plan implementation has the potential to result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (Less than Significant)

Currently, all wastewater collected from the City is treated at the RWF, which has a wastewater treatment capacity of 167 mgd. Current flows to the plant are about 110 mgd (San Jose, 2015a). The RWF's treatment capacity is allocated to each tributary agency on the basis of the peak five-day dry weather flow, also referred to as the peak week flow. The City recently purchased an additional 1.0 mgd of capacity at the plant from West Valley Sanitation District and 0.75 mgd of capacity from Cupertino Sanitary District to bring the City's total contracted peak week flow capacity at the plant to 14.25 mgd. The 2015 peak dry weather flow to the plant was 96.15 mgd, with 6.71 mgd attributed to Milpitas (San Jose, 2015b).

As Milpitas continues to develop in the future, there will be an increased need for water and wastewater services, including a reliable source of recycled water. These needs have been addressed in the three utility districts' master plans and will require that the districts, in coordination with the City, continue to implement phased improvements to some pump stations, sewer mains, and the various wastewater treatment plants when triggered by growth.

Applying Use Factor's (UF) from the 2009 Sewer Master Plan Update factors to the proposed General Plan buildout projections yields a buildout average dry weather flow (ADWF) of approximately 11.8 mgd. This projected ADWF is below the City's current capacity rights of 14.25 mgd. The City may or may not need to purchase additional capacity during the 20-year timeframe of the proposed Plan, depending on the pace of growth and whether full buildout as allowed under the General Plan occurs.

While full buildout of the development contemplated in the proposed General Plan would slightly increase the existing treatment demand at the districts' treatment plants, the proposed General Plan includes a range of policies designed to ensure an adequate wastewater treatment capacity for

development. As described above, the districts must also periodically review and update their Master Plans, and as growth continues to occur within the Planning Area, the districts, in coordination with the City, will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development

Given that projected wastewater generation volumes associated with General Plan buildout would not exceed the projected wastewater generation volumes described in the City of Milpitas 2014 Sewer System Management Plan and 2015 UWMP, this impact would be **less than significant**, and no mitigation is required. The policies and actions listed below would further assist in ensuring that adequate wastewater treatment and conveyance infrastructure is available to serve new growth projected under the proposed General Plan.

GENERAL PLAN MINIMIZATION MEASURES

UTILITIES AND COMMUNITY SERVICES POLICIES

Policy UCS 3-1: Ensure safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

Policy UCS 3-2: Maintain the existing wastewater system on a regular basis to increase the lifespan of the system and ensure public safety.

Policy UCS 3-3: Ensure that all new development provides for and funds its fair share of the costs for adequate sewer collection and treatment, including line extensions, easements, and dedications.

UTILITIES AND COMMUNITY SERVICES ACTIONS

Action UCS 3a: Periodically review and update the Sewer Master Plan and the Sewer System Management Plan.

Action UCS 3b: Require new development to provide for and fund a fair share of the costs for adequate sewer distribution, including line extensions, easements, and plant expansions.

Action UCS 3c: Encourage an industrial pretreatment program for business parks and other industrial uses in accordance with state and federal requirements.

Action UCS 3d: Continue to monitor effluent generation rates citywide, and ensure that Milpitas retains adequate capacity allocations at the San Jose-Santa Clara Regional Wastewater Facility to meet existing and projected demand.

Impact 3.15-4: General Plan implementation may require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects (Less than Significant)

Development allowed under the proposed General Plan would result in increased demand for water supplies, including water conveyance and treatment infrastructure. The proposed General Plan includes policies to ensure that water supplies and treatment are provided at acceptable levels and to ensure that development and growth does not outpace the provision of available infrastructure.

The estimated General Plan Update Buildout ADWF Wastewater Flows is 11.8 mgd. Per the 2014 Sewer System Management Plan, the City's existing total available wastewater treatment capacity is 14.25 mgd. Therefore, the City has excess treatment capacity at the RWF, and no physical plant expansions would be required as a result of the proposed General Plan.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this impact would be **less than significant**, and no additional mitigation is required.

The proposed General Plan includes policies designed to ensure adequate wastewater treatment capacity is available to serve development and to minimize the potential adverse effects of wastewater treatment. These policies are listed in Impact 3.15-3.

3.15.3 STORMWATER DRAINAGE

The information in this section focuses on the potential for the General Plan to result in the demand for new or expanded stormwater drainage facilities. Section 3.10 (Hydrology) includes an expanded analysis of water quality, flooding, and other stormwater related issues. The City's stormwater drainage facilities are shown on Figure 3.15-3.

STORMWATER AND FLOOD CONTROL FACILITIES

Stormwater runoff is collected in a system of nearly 77 miles of storm drain pipelines ranging from 3-inches to 96-inches in diameter, with outfalls and pumping stations along the City's major waterways that ultimately drain to the San Francisco Bay. Each of the city's storm drainage collection systems discharges into one of Coyote Creek's tributaries, whether by gravity or by pumping. Milpitas owns and operates 13 storm water pumping stations, but the Santa Clara Valley Water District manages most of the natural and urbanized waterways into which Milpitas discharges its stormwater.

As noted previously, Milpitas participates in the SCVURPPP, an association of fifteen regional cities and towns whose participating members are required to implement the stormwater pollution management measures outlined in the Santa Clara Valley Urban Runoff Management Plan to control the quality of their stormwater discharge. SCVURPPP members must comply with the California Regional Water Quality Control Board's San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), which regulates the quality and quantity of stormwater discharge to receiving waters. Permit number CAS612008 became effective in November of 2015. The City has typical urban runoff water quality issues, including trash, illicit discharges, and commercial and industrial runoff and is working on implementing a 70 percent reduction in trash load by July 1, 2017, focused around trash capture on 100 acres of high or very high trash generating land uses.

The City's stormwater system design is based on both the 10-year storm hydraulic grade line no higher than two feet below the top of curb elevation at any manhole or drain inlet and the 100-year hydraulic grade line not exceeding the top of manhole or drain inlet, in accordance with the storm drain design criteria set forth by the City of Milpitas in its July 15, 2010, standards and the Santa Clara County Drainage Manual (Santa Clara County, 2007). Nevertheless, large storm events (10-year events and above) have the potential to cause overflows of the City's drainage system. The primary causes are undersized storm drains, sedimentation within the collection system, and flat and adverse street grades. Even the 10-year water surface elevation in the creek may be higher than the ground surface a block away. Pump stations provide solutions in some areas, though not all, and flooding problem areas persist, as noted by the proposed 22 high priority (with potential damage from 10-year flood events) and 31 medium priority (with potential damage from the 100-year event outside a floodplain) projects listed in the Storm Drain Master Plan (Schaaf & Wheeler, 2013).

STORMWATER AND FLOOD CONTROL ISSUES

The City rehabilitated six of its thirteen existing stormwater pump stations in preparation for the 2015-2016 winter season (which had been forecast as an El Niño weather pattern with a high risk of

very large storms). In addition to the emergency repairs and service of six pump stations, a condition assessment of all 13 pump stations was conducted to develop a better understanding of other improvement projects that may be needed in the future. Although the 2015-2016 storm season went smoothly, recommendations for future work included the replacement of underground storage tanks with above ground tanks to facilitate access, putting contracts into place in advance to quickly service high value/complex assets, and implementing a combination of electric and diesel pumps at pump stations (West Yost, 2016).

In the City's Storm Drain Master Plan (Schaaf & Wheeler, 2013), 22 high priority capital improvement projects were identified to improve drainage in flood-prone areas throughout the City. These included storm drain improvements, pump station repair and replacements and the installation of relief drains. While the needed improvements and expected costs, totaling some $65M, are identified in the Storm Drain Master Plan, a revenue stream was not identified, and major pump station repairs and replacements are beyond the annual budget allocation.

REGULATORY SETTING - STORMWATER DRAINAGE

FEDERAL

Clean Water Act (CWA)

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for small Municipal Separate Storm Sewer Systems (MS4s) covered under the CWA to efficiently regulate numerous storm water discharges under a single permit.

Pursuant to the CWA, Milpitas participates in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) as a co-permitee under the California Regional Water Quality Control Board's San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), also referred to as the "MS4 Permit." Permit number CAS612008 became effective in November of 2015. The City has typical urban runoff water quality issues and is working on implementing a 70 percent reduction in trash load by July 1, 2017, focused around trash capture on 100 acres of high or very high trash generating land uses.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and therefore must be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the San Francisco Bay Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

STATE

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include

within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)

The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

LOCAL

California Regional Water Quality Control Board's San Francisco Bay Region Municipal Regional Stormwater NPDES Permit Order R2-2015-0049 (NPDES Permit No. CAS612008) November 2015

The City of Milpitas participates in the SCVURPPP as a co-permitee under the California Regional Water Quality Control Board's San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (Order R2-2015-0049), also referred to as the "MS4 Permit." Permit number CAS612008 became effective in November of 2015. The City has typical urban runoff water quality issues and is working on implementing a 70 percent reduction in trash load by July 1, 2017, focused around trash capture on 100 acres of high or very high trash generating land uses.

Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP)

The SCVURPPP is an association of 15 municipal agencies in the Santa Clara Valley that discharge stormwater to the lower South San Francisco Bay. Member agencies (Co-permittees) include the cities of Campbell, Cupertino, Los Altos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale, the towns of Los Altos Hills and Los Gatos, the County of Santa Clara, and the SCVWD. The SCVURPPP and member agencies implement pollution prevention, source control, monitoring and outreach programs aimed at reducing pollutants in stormwater

runoff, and protecting water quality and beneficial uses of the San Francisco Bay and Santa Clara Valley creeks and rivers. The SCVURPPP also promotes valuing stormwater as an important resource.

The member agencies of the SCVURPPP share a common NPDES permit to discharge stormwater to the South San Francisco Bay. Total population within the SCVURPPP area is approximately 1.7 million people. The SCVURPPP incorporates regulatory, monitoring and outreach measures aimed at reducing pollution in urban runoff to the "maximum extent practicable" to improve the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

C.3 Stormwater Handbook

The C.3 Stormwater Handbook was written to help developers, builders, and project applicants include appropriate post-construction stormwater controls in their projects, to meet local municipal requirements and requirements of the Bay Area Municipal Regional Stormwater Permit (MRP). Municipalities covered by the MRP include: Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Mountain View, Palo Alto, San Jose, Saratoga, Sunnyvale, Santa Clara County, and the Santa Clara Valley Water District. These municipalities must require post-construction stormwater controls on development projects as part of their obligations under Provision C.3 of the MRP. This permit is a NPDES permit issued by the San Francisco Bay RWQCB, allowing municipal stormwater systems to discharge stormwater to local creeks, San Francisco Bay, and other water bodies if municipalities conduct prescribed actions to control pollutants.

The term “post-construction stormwater control” refers to permanent features included in a development project to reduce pollutants in stormwater and/or erosive flows during the life of the project – after construction is completed. The term “post-construction stormwater control” encompasses Low Impact Development (LID) site design, source control, and treatment measures as well as hydromodification management measures. LID techniques reduce water quality impacts by preserving and re-creating natural landscape features, minimizing imperviousness, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource.

City of Milpitas Storm Drain Master Plan (2013)

This document identifies the capital improvements needed to maintain recommended levels of protection against storm water runoff, and the need for a revenue stream that will allow the necessary capital improvements to be made, and the storm drain system kept in working order into the future. The Master Plan contains drainage standards, summarizes the major drainage facilities in the area, evaluates the storm drain collection system and pump stations, analyzes storm drain impacts from new development, identifies capital improvements, outlines the operations, maintenance, and replacement methods, and identifies funding requirements.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it would:

- Require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-5: General Plan implementation may require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects (Less than Significant)

Development under the proposed General Plan may result in increased areas of impervious surfaces throughout the Planning Area, resulting in the need for additional or expanded stormwater drainage, conveyance, and retention infrastructure. The infrastructure and facilities necessary to serve new growth would involve development of some facilities on-site within new development projects, some facilities off-site on appropriately designated land, and may also involve improvements to existing facilities and disturbance of existing rights-of-way. The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the General Plan does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan.

The proposed General Plan includes policies and actions designed to ensure adequate drainage infrastructure is available to serve development, to minimize the potential adverse effects of stormwater conveyance, and to ensure that development does not move forward until adequate drainage capacity exists. Specifically, the proposed General Plan requires all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the City's NPDES Municipal Regional Permit. Project applicants are required to mitigate any drainage impacts as necessary and the General Plan requires the City to maintain drainage channels in a naturalized condition to the greatest extent feasible, and as feasible to include pervious surfaces.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential

environmental impacts, consistent with the requirements of CEQA. As such, this is **a less than significant** impact and no additional mitigation is required.

The policies and actions listed below would further ensure that there is adequate stormwater drainage and flood control infrastructure to serve future development under the General Plan, and would ensure that future drainage and flood control infrastructure projects do not result in adverse environmental impacts.

GENERAL PLAN POLICIES MINIMIZATION MEASURES

UTILITIES AND COMMUNITY SERVICES POLICIES

Policy UCS 4-1: Maintain and improve Milpitas's storm drainage facilities.

Policy UCS 4-2: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process and as required by the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit.

Policy UCS 4-3: Require all future development projects to analyze their drainage and stormwater conveyance impacts and either demonstrate that the City's existing infrastructure can accommodate increased stormwater flows, or make the necessary improvements to mitigate all potential impacts.

Policy UCS 4-4: Applicable projects shall incorporate Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Policy UCS 4-5: Applicable projects shall control peak flows and duration of runoff to prevent accelerated erosion of downstream watercourses.

Policy UCS 4-6: Applicable projects shall minimize directly connected impervious areas by limiting the overall coverage of paving and roofs, directing runoff from impervious areas to adjacent pervious areas, and selecting permeable pavements and surface treatments.

Policy UCS 4-7: Encourage dual-use detention basins for parks, ball fields, and other appropriate uses.

Policy UCS 4-8: Coordinate directly with the Santa Clara Valley Water District to incorporate recreational trails and parkway vegetation design into open stormwater facilities and creek corridors to the greatest extent feasible.

Policy UCS 4-9: Maintain drainage channels in a naturalized condition with riparian corridors and wetland where appropriate, incorporating recreational trails, parkway vegetation, and other amenities and ensuring that vegetation does not reduce channel capacity. Where possible, set back development from these areas sufficiently to maximize habitat values.

Policy UCS 4-10: Where feasible, conform developments to natural landforms, avoid excessive grading and disturbance of vegetation and soils, retain native vegetation and trees, and maintain natural drainage patterns.

Policy UCS 4-11: Where possible, avoid new outfalls to natural or earthen channels.

Policy UCS 4-12: Projects accommodating outdoor activities, including work areas, storage areas or other areas that are potential sources of stormwater pollutants, shall incorporate measures to control those pollutant sources to the maximum extent practicable.

Policy UCS 4-13: Owners and operators of stormwater treatment facilities shall maintain those facilities and ensure they continue to be effective.

Policy UCS 4-14: Construction sites shall incorporate measures to control erosion, sedimentation, and the generation of runoff pollutants to the maximum extent practicable. The design, scope and location of grading and related activities shall be designed to cause minimum disturbance to terrain and natural features. (Title II, Chapter 13 of the Municipal Code).

Policy UCS 4-15: Minimize the use of pesticides that may affect water quality.

UTILITIES AND COMMUNITY SERVICES ACTIONS

Action UCS 4a: Regularly review and update the Storm Drainage Master Plan.

Action UCS 4b: Continue to complete gaps in the drainage system in areas of existing development through the implementation of drainage improvement projects identified in the Storm Drain Master Plan.

Action UCS 4c: Identify which stormwater drainage facilities are in need of repair and address these needs through the City's Capital Improvement Program.

Action UCS 4d: Continuously monitor local and regional efforts to track sea level rise and the associated flood risks. Consider constructing facilities, such as flood walls and additional pump stations, to protect the City from flooding associated with sea level rise.

Action UCS 4e: Continue to implement a comprehensive municipal stormwater pollution-prevention program in compliance with requirements of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP) and the C.3 Stormwater Handbook.

Action UCS 4f: Work cooperatively with local, state, and federal agencies to comply with regulations, reduce pollutants in runoff, and protect and enhance water resources in the Santa Clara Basin through implementation of the Santa Clara Valley Urban Runoff Prevention Program (SCVURPPP).

3.15.4 SOLID WASTE

The City of Milpitas has a franchise agreement for solid waste services with Republic Services (formerly Allied Waste). Waste from the City is hauled to the Newby Island solid waste disposal facility, which is located within Milpitas. In FY 2018, Milpitas disposed of 63,655 tons of solid waste. Milpitas offers green waste and yard trimming disposal and recycling of mixed paper, bottles, cans and other recyclable materials. In 2018, the City's number of pounds of solid waste disposed per person per day was 4.1 for its general population, meeting the state's goal for the community of 6.3 pounds. The pounds of solid waste per person per day for employees in the community was 6.4, meeting the state's goal for the community of 9.7 pounds.

KEY TERMS

Class I landfill: A landfill that accepts for disposal 20 tons or more of municipal solid waste daily (based on an annual average); or one that does not qualify as a Class II or Class III municipal solid waste landfill.

Class II landfill: A landfill that (1) accepts less than 20 tons daily of municipal solid waste (based on an annual average); (2) is located on a site where there is no evidence of groundwater pollution caused or contributed by the landfill; (3) is not connected by road to a Class I municipal solid waste landfill, or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill; and (4) serves a community that experiences (for at least three months each year) an interruption in access to surface transportation, preventing access to a Class I landfill, or a community with no practicable waste management alternative.

Class III landfill: A landfill that is not connected by road to a Class I landfill or a landfill that is located at least 50 miles from a Class I landfill. Class III landfills can accept no more than an average of one ton daily of ash from incinerated municipal solid waste or less than five tons daily of municipal solid waste.

Transfer station: A facility for the temporary deposition of some wastes. Transfer stations are often used as places where local waste collection vehicles will deposit their waste cargo prior to loading into larger vehicles. These larger vehicles will transport the waste to the end point of disposal or treatment.

WASTE DISPOSAL FACILITIES

Newby Island Landfill

The Newby Island Landfill is a Class III Landfill which opened in 1938. The facility accepts municipal solid waste, construction/demolition waste, industrial waste, sludge, tires, green materials, and contaminated soils. Newby Island Landfill is open to the public.

Newby Island Landfill covers 342 acres of land; 298 acres are permitted for disposal. The landfill's permit allows up to 4,000 tons of waste per day to be managed at the facility. According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Facility Permit

(43-AN-0003), as of December 2014, the remaining capacity of the landfill's disposal area is estimated at 57.5 million cubic yards, and the estimated closing date for the landfill is 2041.

HAZARDOUS WASTE DISPOSAL

Household hazardous waste generated in Milpitas can be taken to a household hazardous waste drop-off event sponsored by Santa Clara County Integrated Waste Management. Santa Clara County Integrated Waste Management contains a list of various approved drop-off locations for electronic waste, automotive batteries, tires and antifreeze, other batteries, used automobile oil, fluorescent bulbs, medication, paint, sharp waste, and thermostats. The Household Hazardous Waste Program is funded by participating cities and the County of Santa Clara. These household hazardous waste drop-off events are free for residents to use. State regulations limit the transportation of household hazardous waste to 15 gallons or 125 pounds per vehicle per visit.

SOLID WASTE GENERATION RATES AND VOLUMES

CalRecycle tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the City of Milpitas between 2010 and 2014 are shown in Table 3.15-3.

As shown in the table, the total annual disposal tonnage in Milpitas has been generally trending upward from 2010 and 2014.

TABLE 3.15-3: SOLID WASTE GENERATION RATES

YEAR	*WASTE GENERATION RATE (LBS/PERSON/DAY)*	*TOTAL DISPOSAL TONNAGE (TONS/YEAR)*
2010	4.4	52,973
2011	4.2	52,309
2012	4.5	54,907
2013	5.0	62,179
2014	4.9	62,883
2015	5.3	69,783

SOURCE: HTTP://WWW.CALRECYCLE.CA.GOV/LGCENTRAL/REPORTS/JURISDICTION/REVIEWREPORTS.ASPX ACCESSED APRIL 2016.

As shown in the table above, the per capita waste generation rate increased from 2010 to 2013, decreased in 2014, and peaked in 2015. The total annual disposal tonnage in Milpitas has been trending upward consistently from 2010 through 2015. Additionally, the City's diversion rate increased from 1995 to 2006. The City of Milpitas has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City's per capita disposal target rates are 6.3 and 9.8 pounds per person per day for residents and employees, respectively. The City's per capita disposal rate is below the target rate established by CalRecycle.

REGULATORY SETTING – SOLID WASTE

FEDERAL

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. After several amendments, the current Act governs the management of solid and hazardous waste and underground storage tanks (USTs). RCRA was an amendment to the Solid Waste Disposal Act of 1965. RCRA has been amended several times, most significantly by the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA is a combination of the first solid waste statutes and all subsequent amendments. RCRA authorizes the Environmental Protection Agency (EPA) to regulate waste management activities. RCRA authorizes states to develop and enforce their own waste management programs, in lieu of the Federal program, if a state's waste management program is substantially equivalent to, consistent with, and no less stringent than the Federal program.

STATE

California Integrated Waste Management Act (AB 939 and SB 1322)

The California Integrated Waste Management Act of 1989 (AB 939 and SB 1322) requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25% by 1995 and 50% by 2000. The purpose of AB 939 and SB 1322 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows: Source Reduction; Recycling; Composting; Transformation; and Disposal.

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a "model ordinance" relating to adequate areas for collecting and loading recyclable materials in development projects. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include "adequate, accessible, and convenient areas for collecting and loading recyclable materials." For subdivisions of single family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision.

LOCAL

Milpitas Municipal Code, Chapter 200: Solid Waste Management

Chapter 200 of the Milpitas Municipal Code contains specific requirements related to:

- Keeping or accumulating solid waste,
- Collection and disposal,
- Authorized contractors,
- Manner of collection, removal, and transportation,
- Solid waste disposal,
- Enforcement and penalties, and
- Disaster operations

Milpitas Source Reduction and Recycling Element

Adopted in 1991, the Milpitas Source Reduction and Recycling Element (SRRE) provides a summary and analysis of existing and needed source reduction, recycling, and composting programs and facilities, strategies for handling special wastes, and for funding. Implementation measures for both short (next 5 years) and medium term (next 10 years) are specified and include multifamily residential and non-residential recycling, public awareness, and regulatory programs. Implementation measures outlined in the Element are expected to lead to diversion of an estimated 13.6 to 19.5 percent of the waste stream by 2000.

Goals adopted as part of the City's *Source Reduction and Recycling Element* include:

- Meet or exceed state-mandated solid waste disposition rates by maximizing source reduction, recycling and composting opportunities for Milpitas residents and businesses;
- Motivate the residential and business sectors to reduce and recycle solid waste;
- Ensure that all land development projects provide adequate space and design for waste reduction and management activities and equipment;
- Encourage the development and expansion of local and regional markets for diverted materials;
- Provide solid waste management services that minimize environmental impacts, ensure public health and safety and facilitate waste reduction efforts; and

Increase residents' awareness of proper disposal and reduction methods for wastes.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it would:

- 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; and/or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.15-6: General Plan implementation would comply with federal, state, and local management and reduction statutes and regulations related to solid waste, and would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (Less than Significant)

Future development of projects as contemplated under the proposed General Plan may increase the population within the Planning Area at buildout to approximately 113,530 persons. As described above, the City of Milpitas disposed of 63,655 tons of solid waste in 2018 achieving a disposal rate of 4.1 PPD per resident. Assuming these disposal rates remain constant throughout the life of the General Plan, the new growth under General Plan buildout would result in an increase of approximately 198,606.9 pounds per day of solid waste, which equals 90.1 tons per day or 32,886.5 tons of solid waste per year.

The Newby Island Landfill is a Class III Landfill which opened in 1938. The facility accepts municipal solid waste, construction/demolition waste, industrial waste, sludge, tires, green materials, and contaminated soils. Newby Island Landfill is open to the public.

Newby Island Landfill covers 342 acres of land; 298 acres are permitted for disposal. The landfill's permit allows up to 4,000 tons of waste per day to be managed at the facility. According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Facility Permit (43-AN-0003), as of December 2014, the remaining capacity of the landfill's disposal area is estimated at 57.5 million cubic yards, and the estimated closing date for the landfill is 2041.

The City's projected increase in solid waste generation associated with future buildout of the proposed General Plan is well within the permitted capacity of the Newby Island Landfill. As noted previously, Newby Island Landfill has a remaining capacity of the landfill's disposal area is estimated at 57.5 million cubic yards, and has a current maximum permitted throughput of 4,000 tons of waste

per day. This landfill has an estimated closing date for the landfill of 2041. This is a **less than significant** impact and no mitigation is required.

Future projects within the Planning Area would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. While there is adequate permitted landfill capacity to accommodate future growth, the proposed General Plan includes actions to further reduce the project's impact on solid waste services, as identified below. The General Plan would not exceed the permitted capacity of the landfill serving the city, and the General Plan complies with regulations related to solid waste.

GENERAL PLAN ACTIONS THAT MINIMIZE POTENTIAL IMPACTS

UTILITIES AND COMMUNITY SERVICES POLICIES

Policy UCS 5-1: Continue to require mandatory refuse collection throughout the city.

Policy UCS 5-2: Implement and enforce the provisions of the City's Source Reduction and Recycling Program and update the program as necessary to meet or exceed the State waste diversion requirements.

Policy UCS 5-3: Reduce municipal waste generation by increasing recycling, on-site composting, and mulching, where feasible, at municipal facilities, as well as using resource efficient landscaping techniques in new or renovated medians and parks.

Policy UCS 5-4: Encourage residential, commercial, and industrial recycling and reuse programs and techniques.

Policy UCS 5-5: Coordinate with and support other local agencies and jurisdictions in the region to develop and implement effective waste management strategies and waste-to-energy technologies.

Policy UCS 5-6: When feasible, minimize the potential impacts of waste collection, transportation, and the location of potential disposal facilities upon the residents of Milpitas.

Policy UCS 5-7: Locate waste collection, transfer, and processing facilities in areas that minimize impacts to the surrounding community.

UTILITIES AND COMMUNITY SERVICES ACTIONS

Action UCS 5a: Regularly monitor the level of service provided by garbage and recycling collection contractors to ensure that service levels are adequate.

Action UCS 5b: Implement recycling and waste reduction education programs for City employees. The education program will disseminate information on what and how much is recycled by the City.

Action UCS 5c: Expand the provision of recycling collection containers and services to all City facilities, to the greatest extent feasible.

Action UCS 5d: Include standard language in requests for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill.

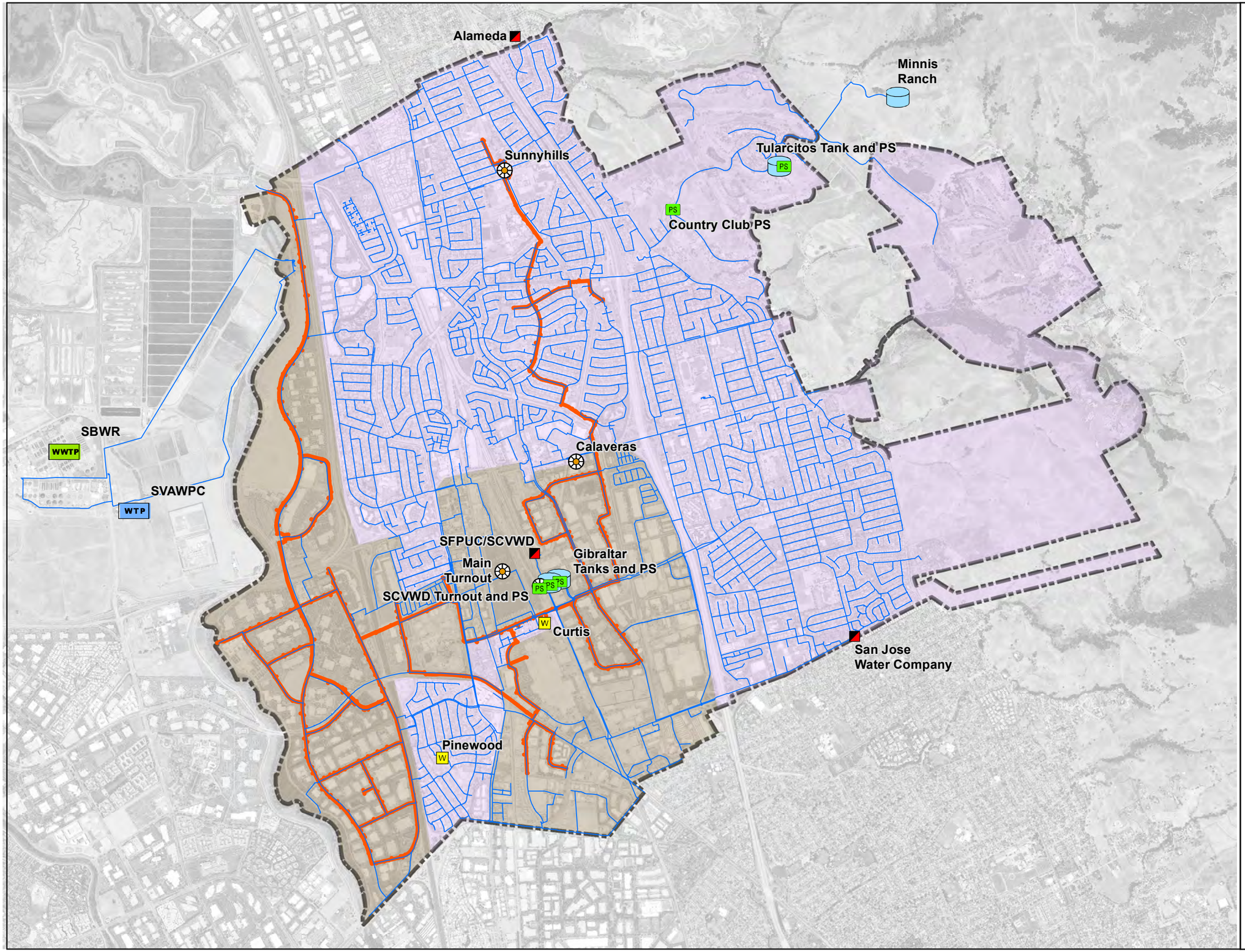
Action UCS 5e: Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- *Increased participation in single family and multifamily residential curbside recycling programs;*
- *Increased participation in commercial and industrial recycling programs for organics, fiber, and containers.*
- *Reduce yard and landscaping waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques; and*
- *Encourage local businesses to provide electronic waste (e-waste) drop-off services and encourage residents and businesses to properly dispose of, or recycle, e-waste.*
- *Promote participation in the annual Household Hazardous Wastes drop-off event in Milpitas.*

Action UCS 5f: Consider the establishment of an ordinance that restricts and/or limits the use of single-use non-biodegradable products in local businesses.

CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.15-1: Water System



Legend

- PS — Pump Station
- W — Well
- Intertie
- Turnout
- Water Tank
- WTP — Silicon Valley Advanced Water Purification Center
- WWTP — South Bay Water Recycling Plant
- Main Pipe
- Recycled Water Pipes
- SFPUC Water
- SCVW District
- City Boundary

N

0 0.25 0.5

Scale in Miles

Source: West Yost Associates, Plate 1, GIS Files Water System, 10/14/2016. Map date: November 1, 2016.

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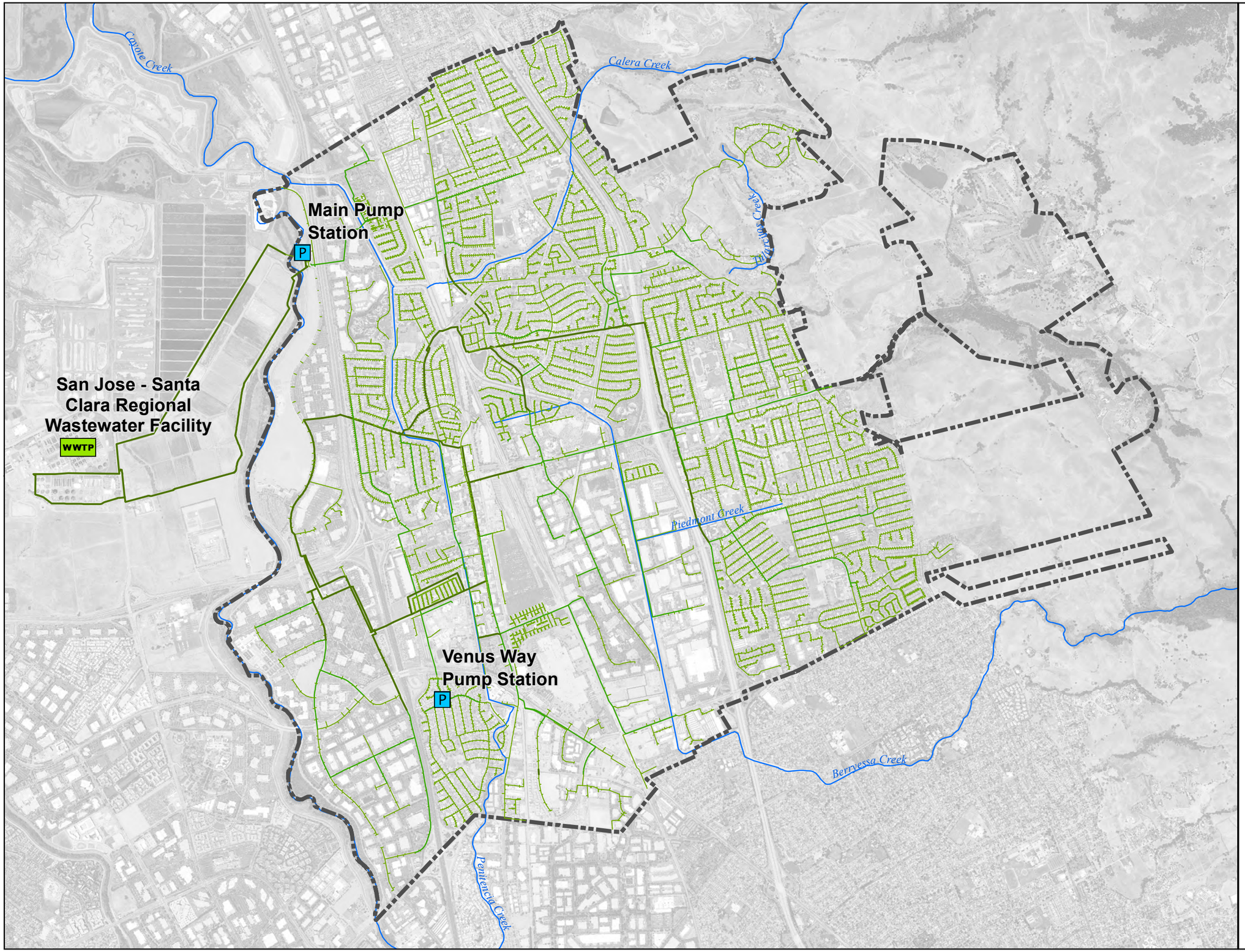
CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.15-2: Sanitary Sewer System



Legend

- WWTP — Wastewater Treatment Plant
- P — Pump Station

Sanitary Sewer Pipe Diameter

- Less than 8"
- 8" - 18"
- Greater than 18"

Other Features

- Creek
- City Boundary

N

0 0.25 0.5

Scale in Miles

Source: West Yost Associates, Plate 3, GIS Files, Sanitary Sewer System, 10/14/2016. Map date: November 1, 2016.

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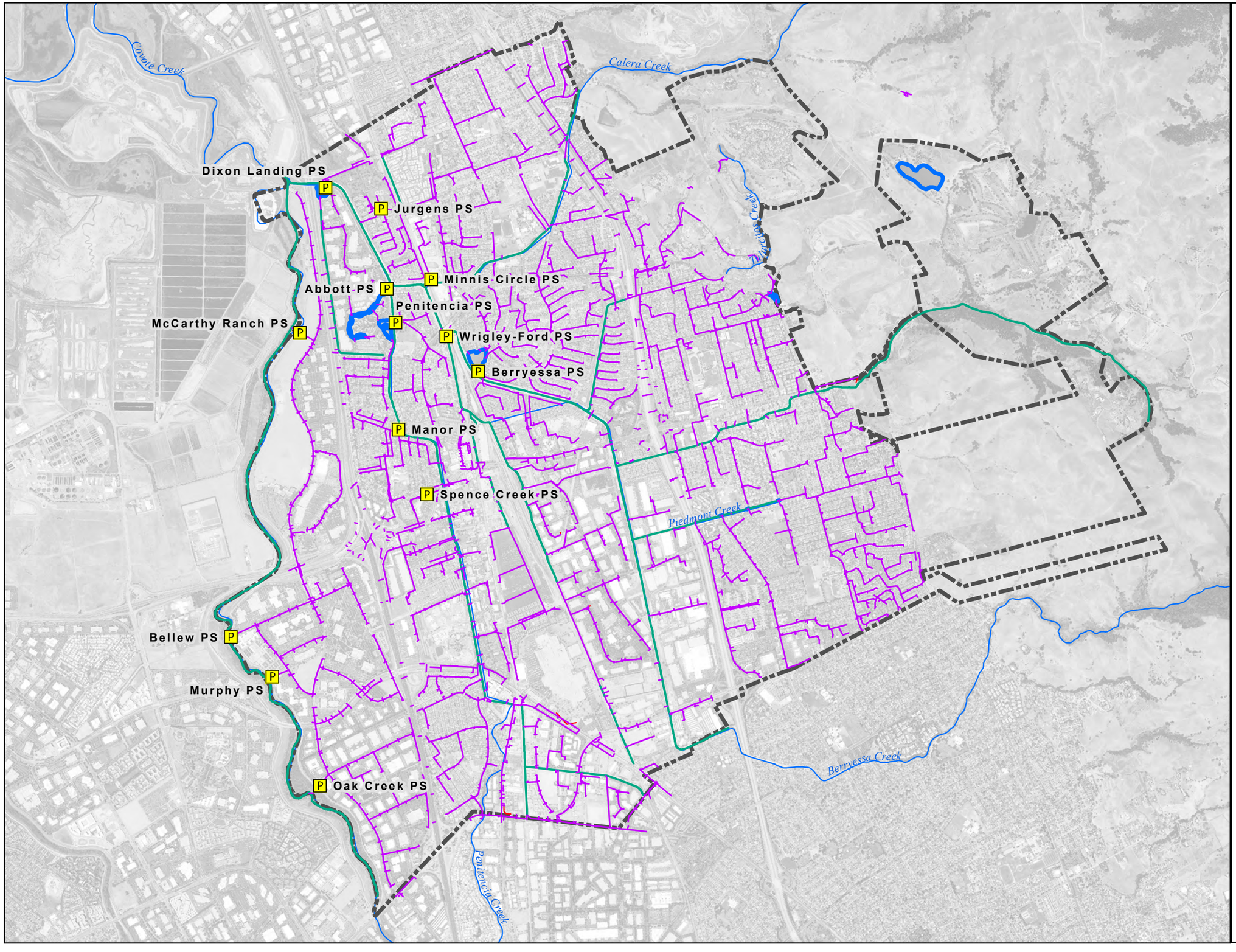
CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 3.15-3: Storm Water System



Legend

- P Pump Station

Stormwater Conveyance System

- Main Pipe
- Drainage Channel
- Detention Basin
- Abandoned

Other Features

- Creek
- City Boundary

N

0 0.25 0.5

Scale in Miles

Source: West Yost Associates, Plate 2, GIS Files, Storm Water System, 10/14/2016. Map date: November 1, 2016.

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This section provides a background discussion of the hazards associated with wildfires in the City of Milpitas. The discussion of fire suppression resources is located within Chapter 3.13, Public Services and Recreation, of this report.

No comments were received during the NOP comment period regrading this environmental topic.

3.16.1 ENVIRONMENTAL SETTING

FIRE HAZARD SEVERITY ZONES

The state has charged CalFire with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas. In addition, CalFire must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas. The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. Figure 3.8-1 included in Chapter 3.8 (Hazards and Hazardous Materials) shows Fire Hazard Severity Zones near Milpitas.

Local Responsibility Areas

Local Responsibility Areas (LRA) are concentrated in the incorporated areas of Milpitas. Milpitas is an LRA that is served by the Milpitas Fire Department. The City of Milpitas or the general vicinity is not categorized as a "Very High" FHSZ by CalFire.

State Responsibility Areas

State Responsibility are found to the east of the city limits in the hilly terrain within the SOI. There are no State Responsibility areas within the city limits of Milpitas, however areas east of the city within the SOI are designated as “high” FHSZ by Calfire. There are no areas that are designated as a “Very High Fire Hazard” area within the Milpitas SOI.

Federal Responsibility Areas

There are no Federal Responsibility Areas within the vicinity of the Planning Area.

IDENTIFYING FIRE HAZARDS

Fuel Rank

Fuel rank is a ranking system developed by CalFire that incorporates four wildfire factors: fuel model, slope, ladder index, and crown index.

The U.S. Forest Service has developed a series of fuel models, which categorize fuels based on burn characteristics. These fuel models help predict fire behavior. In addition to fuel characteristics, slope is an important contributor to fire hazard levels. A surface ranking system has been developed by CalFire, which incorporates the applicable fuel models and slope data. The model categorizes slope into six ranges: 0-10%, 11-25%, 26-40%, 41-55%, 56-75% and >75%. The combined fuel model and slope data are organized into three categories, referred to as surface rank. Thus, surface rank is a reflection of the quantity and burn characteristics of the fuels and the topography in a given area.

The ladder index is a reflection of the distance from the ground to the lowest leafy vegetation for tree and plant species. The crown index is a reflection of the quantity of leafy vegetation present within individual specimens of a given species.

The surface rank, ladder index, and crown index for a given area are combined in order to establish a fuel rank of medium, high, or very high. Fuel rank is used by CalFire to identify areas in the California Fire Plan where large, catastrophic fires are most likely.

The City of Milpitas is primarily designated as moderate by CalFire fuel ranks with portions of the city west of Interstate 880 classified as non-wildland fuel rank. CalFire data for the foothill areas in the eastern portion of the Planning Area (east of Interstate 680) include a preponderance of "high" fuel rank.

Fire Threat

The fuel rank data are used by CalFire to delineate fire threat based on a system of ordinal ranking. Thus, the Fire Threat model creates discrete regions, which reflect fire probability and predicted fire behavior. The four classes of fire threat range from moderate to extreme.

CalFire data for the foothill areas in the eastern portion of the Planning Area (within the SOI) include a preponderance of "high" and "moderate" fire threat.

3.16.2 REGULATORY SETTING

FEDERAL

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of "Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire" by the U.S. Departments of the Interior and Agriculture.

Disaster Mitigation Act (2000)

Section 104 of the Disaster Mitigation Act of 2000 (Public Law 106-390) enacted Section 322, Mitigation Planning of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which created incentives for state and local entities to coordinate hazard mitigation planning and implementation efforts, and is an important source of funding for fuels mitigation efforts through hazard mitigation grants.

National Incident Management System (NIMS)

The City adopted NIMS, which provides a systematic, proactive approach to guide government agencies, nongovernmental organizations, and the private sector to work together to prevent, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment. NIMS improves the City's ability to prepare for and respond to potential incidents and hazard scenarios.

National Fire Plan (NFP) 2000

The summer of 2000 marked a historic milestone in wildland fire records for the United States. Dry conditions (across the western United States), led to destructive wildfire events on an estimated 7.2 million acres, nearly double the 10-year average. Costs in damages including fire suppression activities were approximately 2.1 billion dollars. Congressional direction called for substantial new appropriations for wildland fire management. This resulted in action plans, interagency strategies, and the Western Governor's Association's "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment - A 10-Year Comprehensive Strategy - Implementation Plan", which collectively became known as the National Fire Plan. This plan places a priority on collaborative work within communities to reduce their risk from large-scale wildfires.

Healthy Forest Initiative (HFI) 2002/Healthy Forest Restoration ACT (HFRA) 2003

In August 2002, the Healthy Forests Initiative (HFI) was launched with the intent to reduce the severe wildfires risks that threaten people, communities, and the environment. Congress then passed the Healthy Forests Restoration Act (HFRA) on December 3, 2003 to provide the additional administrative tools needed to implement the HFI. The HFRA strengthened efforts to restore healthy forest conditions near communities by authorizing measures such as expedited environmental assessments for hazardous fuels projects on federal land. This Act emphasized the need for federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects and places priority on fuel treatments identified by communities themselves in their Community Wildfire Protection Plans.

Department of the Interior Department Manual Part 620

Wildland Fire Management. Part 620 of the Department of the Interior Departmental Manual pertains to wildland fire management policies, with the goal of providing an integrated approach to wildland fire management. The guiding principles of the plan emphasize the need for public health and safety considerations, risk management protocols, inter-agency collaboration, and economic feasibility of wildfire management practices, as well as the ecological role of wildfires.

STATE

California Strategic Fire Plan

This statewide plan is a strategic document, which guides fire policy for much of California. The plan is aimed at reducing wildfire risk through pre-fire mitigation efforts tailored to local areas through assessments of fuels, hazards, and risks.

California State Multi-Hazard Mitigation Plan

The purpose of the State Multi-Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural- and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, state, and federal agencies as well as the private sector.

California Government Code

California Government Code Section 65302.5 requires the State Board of Forestry and Fire Protection to provide recommendations for a local jurisdiction's General Plan fire safety element when the jurisdiction amends its general plan. While not a direct and binding fire prevention requirement for individuals, general plans that adopt the Board's recommendations will include goals and policies that provide for contemporary fire prevention standards for the jurisdiction. While the State Board of Forestry and Fire Protection has not specifically commented on the Proposed General Plan at the time that this EIR was written, the Proposed General Plan has been developed to include best practices to ensure contemporary fire prevention standards, as described in greater detail under the impact discussions below.

California Government Code Section 51175 defines Very High Fire Hazard Severity Zones and designates lands considered by the State to be a very high fire hazard.

California Government Code Section 51189 directs the Office of the State Fire Marshal to create building standards for wildland fire resistance. The code includes measures that increase the likelihood of a structure withstanding intrusion by fire (such as building design and construction requirements that use fire-resistant building materials) and provides protection of structure projections (such as porches, decks, balconies and eaves), and structure openings (such as attics, eave vents, and windows).

California Public Resource Code

The State's Fire Safe Regulations are set forth in Public Resources Code §4290, which include the establishment of SRAs.

Public Resources Code §4291 sets forth defensible space requirements, which are applicable to anyone that …owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material (§4291(a)).

Public Resources Code § 4292-4296 and 14 CCR 1256: Fire Prevention for Electrical Utilities address the vegetation clearance standards for electrical utilities. They include the standards for clearing around energy lines and conductors such as power-line hardware and power poles. These regulations are critical to wildland fire safety because of the substantial number of power lines in wildlands, the historic source of fire ignitions associated with power lines, and the extensive damage that results from power line caused wildfires in severe wind conditions.

Assembly Bill 337

Per AB 337, local fire prevention authorities and the California Department of Forestry and Fire Protection (CalFire) are required to identify "Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRA). Standards related to brush clearance and the use of fire resistant materials in fire hazard severity zones are also established.

CA Fire Code

The CA Fire Code (CFC) establishes standards related to the design, construction, and maintenance of buildings. The standards set forth in the CFC range from designing for access by firefighters and

equipment and minimum requirements for automatic sprinklers and fire hydrants to the appropriate storage and use of combustible materials.

CA Code of Regulations Title 8

In accordance with CCR, Title 8, §1270 and §6773 (Fire Prevention and Fire Protection and Fire Equipment), the Occupational Safety and Health Administration (Cal OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

CA Code of Regulations Title 14 (Natural Resources)

Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

CA Code of Regulations Title 19 (Public Safety)

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

CA Code of Regulations Title 24 (CA Building Standards Code)

The California Fire Code is set forth in Part 9 of the Building Standards Code. The CA Fire Code contains fire-safety building standards referenced in other parts of Title 24.

California Health and Safety Code §1300 et seq., CA Building Codes

State fire regulations are set forth in §13000 et seq. of the California Health and Safety Code, which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the CA Building Codes and mandate the abatement of fire hazards.

The code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

CA Health and Safety Code Division 11 (Explosives)

Division 11 of the Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

CA Health and Safety Code Division 12.5 (Buildings Used by the Public)

This Division establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings.

California Senate Bill No. 1241.

California Senate Bill No. 1241 requires that the Safety Element component of city or county general plans to incorporate fire risk related to SRAs and Very High Fire Hazard Severity Zones.

LOCAL

City of Milpitas Municipal Code

Title 5 – Public Health, Safety and Welfare (Chapter 300 Fire Code); this section includes the adoption of the 2019 California Fire code and the adoption of additional amendments.

3.16.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact related to wildfires If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.
- 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.
- 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.
- 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.

IMPACTS AND MITIGATION MEASURES

Impact 3.16-1: General Plan implementation could substantially impair an adopted emergency response plan or emergency evacuation plan (Less than Significant)

The General Plan would allow a variety of new development, including residential, commercial, industrial, and public service projects, which would result in increased jobs and population in Milpitas. Road and infrastructure improvements would occur to accommodate the new growth as further discussed in Chapter 3.14 (Transportation). Future projects are not anticipated to remove or impede evacuation routes, and the General Plan does not include land uses, policies, or other components that conflict with adopted emergency response or evacuation plans. The City is a member of the Santa Clara County Emergency Management Organization. This entity provides mutual aid to communities via the Santa Clara County Sheriff's Department and the State of California Office of Emergency Services.

The proposed Milpitas General Plan is a policy document that does not include any site specific designs or proposals and does not propose any entitlements for development that would have the potential to impair or conflict with an adopted emergency response or evacuation plan. Any future development projects that would implement the General Plan, including buildout of uses

contemplated under the proposed Land Use Map, would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as further CEQA analysis of project-specific impacts.

The General Plan ensures that the City maintains adequate emergency access as well as staffing, training, station locations, emergency response. Important new critical facilities would also be located to ensure resiliency and functionality in the event of a natural disaster. Implementation of the General Plan would have a **less than significant** impact with regard to this issue.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA 3-1: Ensure that new critical facilities in Milpitas are located in areas that minimize exposure to natural hazards.

Policy SA 3-2: Ensure that critical facilities are properly supplied and equipped to provide emergency services.

Policy SA 3-3: Ensure that critical facilities are designed and constructed to withstand the "maximum probable" seismic events and still remain capable of service use to provide emergency assistance after a major disaster.

Policy SA 3-4: Support local and regional disaster planning and emergency response planning efforts, and look for opportunities to collaborate and share resources with other municipalities in the region.

Policy SA 3-5: Continue to maintain the City's Emergency Operations Center and conduct regular staff training exercises to ensure that all City staff members, in additional to emergency responders, are adequately trained to fulfill their duties in the event of an emergency.

Policy SA 3-6: Maintain effective mutual aid agreements for fire, medical response, and other functions as appropriate.

Policy SA 3-7: Encourage residents and community leaders to participate in disaster training programs, such as the "Strategic Actions For Emergencies" (S.A.F.E) emergency preparedness program and the Community Emergency Response Team (CERT) program. Where feasible, assist in neighborhood drills and safety exercises to increase participation and build community support.

Policy SA 3-8: Clearly communicate to the public the City's plans, procedures, and responsibilities in the event of a disaster or emergency. Communications and information made available to the public shall be provided in multiple languages to ensure the greatest number of community members have access to this information.

Policy SA 3-9: Encourage residents to register with the Santa Clara County Emergency Alert System (AlertSCC) to ensure notification in the event of an emergency.

Policy SA 3-10: Continue to promote public safety through public education programs, and ensure programs are available and accessible to all segments of the community.

CIRCULATION ELEMENT POLICIES

Policy CIR 1-13: Maintain up-to-date emergency preparedness and evacuation plans and procedures in coordination with appropriate state, regional, county, and local agencies and departments.

Policy CIR 7-5: Monitor the development of new and emerging transportation technologies – such as autonomous vehicles – to enable the City to prepare for their incorporation into the transportation system if safe and appropriate.

SAFETY ELEMENT ACTIONS

Action SA 3a: Coordinate with the Santa Clara County Office of Emergency Services (OES) and other local agencies, as necessary, to participate in and implement the Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for Santa Clara County.

Action SA 3b: Conduct regular emergency response training exercises and or participate in regional exercises to ensure that emergency response personnel are adequately trained and prepared for emergency situations. Critical facilities within the city should also be annually assessed to ensure they are properly supplied.

Action SA 3c: Publicize and regularly update information at City Hall, other public locations, and via the City website related to emergency and disaster preparedness including evacuation routes and specific steps to take in the event of a flood, fire, earthquake, or other emergency. Improve the visibility and accessibility of emergency and disaster preparedness information on the City's website by making information more prominent, more detailed, and by providing critical information in multiple languages.

Action SA 3d: Provide adequate funding for fire and police services to ensure preparedness of response teams and implementation of emergency response plans.

Action SA 3e: As part of the development review process, consult with the police and fire departments in order to ensure that the project provides adequate emergency access.

Action SA 3f: Encourage schools, neighborhood associations, mobile home park associations, and other interested groups to teach first aid and disaster preparedness, including Community Emergency Response Team (CERT) programs, Map Your Neighborhood programs, and other tools available to neighborhood and community groups to improve disaster preparedness.

Action SA 3g: Periodically review, maintain, and repair City roadways and emergency access routes, and provide signage, where necessary, to clearly identify emergency access routes.

Action CIR 1h: Design streets to operate with vehicle speeds that are safer for all users, especially pedestrians and bicyclists while providing adequate access for emergency vehicles. Speed reduction strategies include reduced lane widths and application of traffic calming measures in accordance with the street's designated functional classification.

Action CIR 2b: Adopt traffic calming metrics and strategies to reduce vehicle speeds, enhance safety, increase options for physical activity and account for the needs of emergency vehicle access.

Action CIR 1h: Design streets to operate with vehicle speeds that are safer for all users, especially pedestrians and bicyclists while providing adequate access for emergency vehicles. Speed reduction strategies include reduced lane widths and application of traffic calming measures in accordance with the street's designated functional classification.

Impact 3.16-2: General Plan implementation would not exacerbate wildfire risks, or thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire (Less than Significant)

Wildfires generally ignite structures in several ways: burning embers landing on the structure or flammable material next to the structure; direct flame contact; and radiant heat from fire close to the structure (IBHS 2018). Embers are the most important cause of home ignition. Embers ignite structures by entering through attic vents, igniting flammable materials around the home (litter in the roof gutter, wood stacks, or wood fencing), or finding their way under roofing materials (California Chaparral Institute 2018).

A wildland urban interface (WUI) is any area where structures and other human developments meet or intermingle with wildland vegetative fuels—the shrubs, trees and grasses. These plants and wildland areas have evolved over time to burn. Developments in the wildland-urban interface exacerbate fire occurrence and fire spread in several ways:

- Increased numbers of human-caused wildfires.
- Wildfires become harder to fight.
- Firefighting resources are diverted from containing the wildfire to protecting lives and homes.
- Letting natural fires burn becomes impossible, leading to build-up of fuel and increasing wildfire hazard further. (Radeloff, Volker, et al., 2018)
- Increased fire frequency tends to eliminate native shrubs, which are replaced by weedy, highly flammable annual grasslands. (USGS 2012)

Air Pollution from Wildfire Smoke is made up of a complex mixture of gases and fine particles produced when wood and other organic materials burn. The biggest health threat from smoke is from fine particles. These microscopic particles can penetrate deep into the lungs. They can cause a range of health problems, from burning eyes and a runny nose to aggravated chronic heart and lung diseases. Some populations are more sensitive than others to smoke—for instance, people with heart or lung diseases, the elderly, children, people with diabetes, and pregnant women (CARB 2005, and Airnow 2018).

The rate of wildfire spread due to slope and wind is generally proportional to the grade upslope and wind speed and associated location downwind.

Fire threat determination is a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined to create four threat classes ranging from moderate to extreme. Fire threat can be used to estimate the

potential for impacts on various assets and values susceptible to fire. Impacts are more likely to occur and/or be of increased severity for the higher threat classes. As shown on Figure 3.8-1, the City of Milpitas does not contain any areas determined to have either a high or very high fire threat to people within the City limits.

Any future projects contemplated under the General Plan would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements as part of the project's approval process. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to that project, associated with wildland fire hazards as required under CEQA. The General Plan and General Plan Land Use Map do not designate any new urban uses in the areas designated as a High FHSZs.

The Milpitas General Plan is a policy document that does not include site specific designs or proposals and does not propose any entitlements for development that would have the potential to expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Any future development projects that would implement the General Plan including buildout of uses allowed under the proposed Land Use Map would be subject to all applicable City regulations, reviews, and requirements pertaining to emergency response, emergency access, and maintaining emergency evacuation routes, as well as being subject to all applicable building code and fire code requirements as well as further CEQA analysis of project-specific impacts for individual development projects.

Nothing in the General Plan will substantially alter the slope, prevailing winds, or other factors that would increase exposure to Milpitas residents, employees or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. General Plan implementation would not exacerbate wildfire risks in VHFHSZs; therefore, these impacts would be **less than significant**. Nonetheless, the General Plan includes Policies and Actions related to minimizing wildfire risk and are included below.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA 4-1: Provide adequate funding for police and fire facilities and personnel to accommodate existing and future citizens' needs to ensure a safe and secure environment for people and property throughout the city.

Policy SA 4-8: Continue to work cooperatively with state, regional, and local public agencies with responsibility for fire protection in hillside areas.

Policy SA 4-9: Ensure that fire and emergency medical services meet existing and future demand by maintaining a response time of four minutes or less for all urban service areas.

Policy SA 4-10: Ensure that adequate water supplies are available for fire-suppression throughout the city. Require development to construct and fund all fire suppression infrastructure equipment needed to provide adequate fire protection services to new development.

Policy SA 4-11: Promote community safety through education by supporting and leading community events including National Night Out, neighborhood watch programs, increased community training opportunities, and expanding emergency preparedness outreach and opportunities to traditionally underserved/underrepresented areas and communities within the city.

Policy SA 6-7: As feasible support and prioritize adaptation through natural/living measures (e.g., horizontal levees, wetland/marsh/habitat restoration, greenspaces, fire resistant landscaping etc.)

ACTIONS

Action SA 4b: As part of the development review process require applications to be reviewed by the Public Works Department and Fire Department in order to ensure that development projects facilitate adequate fire services, access, and fire prevention measures.

Action SA 4c: Conduct periodic Police and Fire Department evaluations that analyze response times and other incident data to ensure adequate services are provided throughout the city.

Action SA 6g: Conduct a climate vulnerability assessment and set preparedness goals and strategies to safeguard human health and community assets susceptible to the impacts of a changing climate (e.g., increased drought, wildfires, flooding, and extreme heat). Incorporate these into all relevant plans, including the Emergency Preparedness Plan, Local Hazard Mitigation Plan, Dam Failure Plan, Climate Action Plan, Watershed Protection Plan, and Energy Assuredness Plan.

Impact 3.16-3: 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 (Less than Significant)

Development would require the construction and installation of infrastructure, including roads water and sewer and power lines. Development of such infrastructure may increase wildfire risks in the affected areas. Infrastructure required to serve development allowed under the General Plan would generally be located in and along established City roadways and would be located in areas that are already urbanized and are currently served by infrastructure. As such, implementation of the General Plan would not exacerbate wildfire risks.

The City of Milpitas Municipal Code includes Title 5 – Public Health, Safety and Welfare (Chapter 300 Fire Code); this section includes the adoption of the 2019 California Fire code and the adoption of additional amendments.

General Order (GO) 95 of the California Public Utilities Commission (CPUC) regulates all aspects of design, construction, and O&M of overhead electrical power lines and fire safety hazards for utilities

subject to its jurisdiction. GO 165 imposes inspection requirements for transmission and distribution lines, and GO 166 requires emergency response procedures to respond to electric system failures, major outages, or hazards posed by damage to electric utility facilities. Rule 11 enables electric utilities to suspend customer service when minimum vegetation clearance requirements are not met. On February 5, 2014, the CPUC adopted its Decision Adopting Regulations to Reduce the Fire Hazards Associated with Overhead Electric Utility Facilities and Aerial Communications Facilities. (Decision 14-02-015.) In addition to updating various GO 95 requirements and ordering further study, the decision called for creation by the CPUC of a High Fire-Threat District (HFTD) map identifying zones of high hazard, elevated risk and extreme risk for destructive utility-associated wildfires.

On December 21, 2017, the CPUC issued its Decision Adopting Regulations to Enhance Fire Safety in the High Fire Threat District, adding statewide HFTD map requirements to GO 95 and enhancing GO 95's fire safety regulations within HFTD areas. (Decision 17-12-024.) As described in the CPUCs High Fire-Threat District (HFTD) maps the Milpitas Planning Area is not within a Tier 3 – Extreme risk for destructive utility-associated wildfires area. Portions of the City's Planning Area in the hillside areas are within the CPUC's Tier 2 – Elevated district.

Development allowed under the General Plan would be required to comply with the applicable provisions of the California Building Code (CBC), and CA Fire Code (CFC). Future developments utility infrastructure would also be subject to the requirements established in the additional Public Resources Code including: Public Resources Code Section 4292, which requires clearing of flammable fuels for a minimum 10-foot radius from the outer circumference of poles and towers; and Public Resources Code Section 4293, which sets basic requirements for clearances around electrical conductors. Furthermore, the future projects would be required to meet vegetation clearance requirements outlined in Title 14, Section 1104.1(d) of the California Code of Regulations for single overhead facilities, and in CPUC General Order 95 requirements for overhead utility lines in high-fire-threat areas.

The General Plan includes requirements for adequate water supply and water flow availability, emergency access, fire protection services, fire safe design site standards, and ensuring public awareness regarding fire safety. All future development projects would be required to be consistent with the City's municipal code standards related to the California Fire Code and would also be subject to CCR and PUC standard outlined above.

As described previously, the Milpitas General Plan is a long range policy document that does not include site specific designs or proposals, and does not propose or approve any entitlements for development. The majority of all future development would occur within existing developed areas.

The potential for future projects to impact environmental resources to meet compliance with fire development standards such (as fuel breaks and clearance requirements) would require site specific environmental require under CEQA to identify any site-specific impacts. As demonstrated throughout this EIR, implementation of the various policies and actions contained in the General Plan would reduce potential impacts associated with the construction and expansion of infrastructure. Implementation of local and state requirements would ensure that potential

wildland fire hazards would not be exacerbated by local infrastructure, and this impact would be considered **less than significant**.

Impact 3.16-4: 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 (Less than Significant)

Debris flows and post-fire earthflow hazards include fast-moving, highly destructive debris flows that can occur in the years immediately after wildfires in response to high intensity rainfall events, and flows that are generated over longer time periods that are accompanied by root decay and loss of soil strength. Post-fire debris flows are particularly hazardous because they can occur with little warning, exert great impulsive loads on objects in their paths, strip vegetation, block drainage ways, damage structures, and endanger human life. Debris flows differ from mudflows in that debris flows are composed of larger particles. Fires increase the potential for debris flows in two ways:

1. Fires may bake soil into a hard crust that repels water.
2. Fires destroy vegetation that would slow and absorb rainfall and whose roots would help stabilize soil. (USGS 2018)

Post-fire debris flows are most common in the two years after a fire. It takes much less rainfall to trigger debris flows from burned basins than from unburned areas. In portions of California, as little as 0.3 inch of rainfall in 30 minutes has triggered debris flows, and any storm that has intensities greater than about 0.4 inch per hour can produce debris flows (USGS 2017). The burning of vegetation and soil on slopes more than doubles the rate that water will run off into watercourses (CGS 2018a).

Expansion of man-made developments into fire-prone wildlands has created situations where fast-moving, highly destructive debris flows triggered by intense rainfall are one of the most dangerous post-fire hazards. Such debris flows are particularly dangerous because they tend to occur with little warning.

After fire events, local creeks, steep slopes and seasonal drainages may become susceptible to increased runoff, landslides and debris flows as a result of cover changes as a result of wildfire. Landslide and slope stability is influenced by physical factors, such as slope, soil, vegetation, and precipitation. Landslides require a slope, and can occur naturally from seismic activity, excessive saturation, and wildfires, or from human-made conditions such as construction disturbance, vegetation removal, wildfires, etc. Figure 3.6-5 (located in Chapter 3.6 Geology and Soils) illustrates the landslide potential (for non-seismically included potential) in the vicinity of the City of Milpitas. The landslide potential is relatively low throughout the majority of the City in the western portion, where elevation change is relatively low. However, the landslide potential increases dramatically in the eastern portion of the City, which contains a large area with increased elevation change and medium and high landslide potential.

FEMA mapping provides important guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance

Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). The FEMA FIRM for the Planning Area is shown on Figure 3.9-2 (located in the Hydrology and Water Quality Chapter of this DEIR).

In addition, as shown on Figure 3.9-2, a large area within central Milpitas and along Coyote Creek is located within a mapped portion of the 100- year and 500- year FEMA flood zones. This area is generally located in the lower and flatter portion of the Planning Area. Risk of flooding along this area is exists, and flooding within this location would be likely to affect a large area of existing development. No major fires have recently impacted the Planning Area and area fires do not impact the potential for local debris flows on local waterways within the developed portions of Milpitas, as wildfire prone areas are generally located in the hillside portions of the Planning Area within the SOI and not along the local drainages that occur in the flat developed portions of the city that include urban development. However, debris flow could occur in burn areas in the hillside areas along local waterways. These areas contain very limited development and generally wouldn't impact the urban portions of the city.

The General Plan would allow development and improvement projects that would involve some land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. The majority of intensified development would occur in areas of the city that are currently developed with urban uses and are generally not subject to severe flooding or erosion. As required by the Clean Water Act, each subsequent development project or improvement project will require an approved Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices for grading and preservation of topsoil. SWPPPs are designed to control storm water quality degradation to the extent practicable using best management practices during and after construction.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBC, Zoning Ordinance, and other regulations. In addition to compliance with City standards and policies, the Regional Water Quality Control Board will require a project specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area of one acre or larger. The SWPPPs will include project specific best management measures that are designed to control drainage and erosion. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

The General Plan requires the City to review all development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure that off-site runoff is not increased as a beyond pre-development levels during rain and flood events. Additionally, policies under the proposed General Plan require that all new developments and redevelopments in areas susceptible to flooding incorporate mitigation measures designed to reduce flood hazards and ensures the City maintains adequate Infrastructure and regularly assesses the status of local storm drainage infrastructure to ensure that the system can adequately reduce flood hazards. Further, all future development allowed under the General Plan would be subject to

all existing building codes and development standards described above to control for runoff, instability, and drainage issues.

The topography in the urban portions of the Planning Area is considered relatively flat and would generally not be subject to debris flows. In the event that a significant wildfire were to burn in the hillside portions of the Planning Area, portions of SOI may be exposed to potential risks associated with landslides, debris flows, and flooding in the weeks, months following the fire as a result in changes to the vegetative cover of the land and the rain absorption capacity of the soil. It is important to note that the areas within the SOI at-risk of exposure to these potential impacts are sparsely developed. Adoption of the proposed General Plan would not increase or exacerbate these risks, however, areas of the SOI would still remain at risk in the event of a significant wildfire up-slope from the City.

While the City cannot state with certainty that future increased risks associated with post-fire runoff and debris flows would not occur in Milpitas, for the reasons explained above, implementation of the General Plan would not exacerbate this risk and this impact would be considered **less than significant**.

GENERAL PLAN MINIMIZATION MEASURES

SAFETY ELEMENT POLICIES

Policy SA 2-1: Participate in planning efforts undertaken at the regional, state, and federal levels to improve flood management facilities and dam safety throughout Santa Clara County.

Policy SA 2-2: Coordinate with regional and local agencies and private landowners to plan, finance, construct, and maintain local and regional stormwater management and conveyance facilities.

Policy SA 2-3: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for off-site flooding.

Policy SA 2-4: Ensure that construction activities and new development will not result in the creation of adverse, flood-related impacts to existing properties and/or flood control and drainage structures.

Policy SA 2-5: Unless otherwise mitigated, require new structures to be located outside of the 100-year floodplain. All new development within an identified Flood Hazard Area shall be built according to Federal Emergency Management Agency standards and comply with the provisions for flood hazard reduction criteria (Milpitas Municipal Code Section XI-15-5).

Policy SA 2-6: Encourage and accommodate multipurpose flood control projects that incorporate recreation, education, resource conservation, preservation of natural riparian habitat, and the scenic value of drainages, creeks, and detention ponds.

Policy SA 2-7: Encourage flood control measures identified within the Conservation Element such as bioswales, Low Impact Development (LID) strategies, green streets and parking lots and permeable materials that enhance natural drainage features, vegetation, and natural waterways, while still providing for adequate flood control and protection.

Policy SA 2-8: To the greatest extent possible, cooperate with the Santa Clara Valley Water District and Army Corps of Engineers in their development and improvement of flood control facilities which are intended to protect areas from the occurrence of the "1%" or "100-year" flood, or other flood events as required by the state.

Policy SA 2-9: Support state and federal legislation which provides funding for the construction of flood protection improvements in urbanized areas.

Policy SA 2-10: To the greatest extent possible, cooperate with the Santa Clara Valley Water District and Army Corps of Engineers in their efforts to develop and maintain additional flood protection retention facilities in areas where they are needed or where the design capacity of existing retention facilities cannot be restored.

Policy SA 2-11: As a part of the City's policies for addressing the effects of climate change and projected water level rise in San Francisco Bay, require evaluation of projected inundation for development projects near San Francisco Bay or at flooding risk from local waterways which discharge to San Francisco Bay. For projects affected by increased water levels in San Francisco Bay, the City shall require incorporation of mitigation measures prior to the approval of the project. Mitigation measures that are to be incorporated into the project design or project location shall be developed by a qualified engineer, and completed in such a way so as to prevent exposure to substantial flooding hazards from increased water levels in San Francisco Bay during the anticipated useful lifetime of the structures.

ACTIONS

Action SA 2a: As part of the development review process continue to require new developments to prepare hydraulic and storm drainage studies as necessary to define the net increase in storm water run-off resulting from construction and operation, and require mitigation to reduce identified impacts. Drainage and grading plans shall identify BMP protections and include standards established and recommended by the City that shall be incorporated into development.

Action SA 2b: Continue to participate in the National Flood Insurance Program (NFIP), and NFIP's Community Rating System (CRS).

Action SA 2c: Continue to review projects in flood hazard areas to ensure compliance with Milpitas Municipal Code Title XI, Chapter 15 – (Floodplain Management Regulations).

Action SA 2d: Periodically Review Milpitas Municipal Code Title XI, Chapter 15 – (Floodplain Management Regulations), and revise as necessary to ensure that development standards are consistent with the requirements of state and Federal law.

Action SA 2e: Periodically Review the City of Milpitas Storm Drain Master Plan, and update as necessary, to ensure that the Plan includes a comprehensive list of capital improvements needed to

maintain recommended levels of protection against flooding and stormwater runoff. Continue to seek new revenue streams to fund the necessary improvements and maintenance of the City's storm drainage infrastructure.

Action SA 2f: Periodically review the condition of City-owned bridges, culverts, canals and other flood control and stormwater conveyance infrastructure, and when feasible include necessary improvements within the CIP to increase safety and the adequate conveyance of stormwater. Encourage external agencies to undertake regular review of their non-City-owned flood control and storm water infrastructure located within the Milpitas Planning Area, as well as those facilities located both upstream and downstream.

Action SA-2g: Require developers to adequately fund the costs of drainage facilities needed for surface runoff generated as a result of new development.

Action SA-2h: Monitor information from regional, state, and federal agencies on water level rises in San Francisco Bay on an on-going basis. Use this information to determine if additional adaptive management actions are needed and implement those actions to address flooding hazards from increasing sea levels for existing or new development and infrastructure.

Action SA 6g: Conduct a climate vulnerability assessment and set preparedness goals and strategies to safeguard human health and community assets susceptible to the impacts of a changing climate (e.g., increased drought, wildfires, flooding, and extreme heat). Incorporate these into all relevant plans, including the Emergency Preparedness Plan, Local Hazard Mitigation Plan, Dam Failure Plan, Climate Action Plan, Watershed Protection Plan, and Energy Assuredness Plan.

Action SA 6h: Collaborate with the Santa Clara Valley Water District to support the priorities and projects of the Safe, Clean Water and Natural Flood Protection Program. Pursue grant funding opportunities from the District to provide funding for water conservation, habitat restoration, and open space projects that increase community resiliency, while improving water quality and increasing flood safety throughout the community.

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CEQA requires an EIR to evaluate a project's effects in relationship to broader changes that are occurring or that may foreseeably occur, in the surrounding environment. Accordingly, this chapter presents discussion of CEQA-mandated analysis for cumulative impacts, irreversible impacts, and growth inducement associated with the proposed General Plan.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

INTRODUCTION

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the General Plan. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively Considerable," as defined in section 15065(a)(3), means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

> (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,
>
> (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

CUMULATIVE SETTING

Under CEQA, the discussion of cumulative impacts should focus on the severity of the impacts and the likelihood of their occurrence. The geographic scope for the cumulative analysis covers the entire Milpitas Planning Area, which includes the City limits and the Sphere of Influence, as shown on Figure 2.0-2 (see Chapter 2.0: Project Description). For Milpitas, the City limits and SOI are contiguous on the western boundary of the Planning Area, as well as on the northern boundary generally west of Interstate 680 and on the southern boundary generally west of Piedmont Road. The SOI boundary extends out east past the eastern City limit into the hillside generally bound by Scott Creek to the north, Berryessa Creek to the south, and Calaveras Road and Felter Road on the east. It should be noted that, for some environmental topics, the geographic scope for the cumulative analysis also covers the boundaries of Santa Clara County, the San Francisco Bay Area Air Basin, and/or other jurisdictional boundaries that are relevant to the particular environmental topic.

In most cases in this EIR, the buildout analysis utilizes a 20-year horizon, and 2040 is assumed to be the buildout year of the General Plan. The year 2040 is used as the benchmark year for the cumulative analysis contained in this EIR. This year was chosen based on the fact that the General Plan was developed as a 20-year plan for Milpitas, and the General Plan is scheduled for adoption in late 2020.

Land Use/Growth Projections

Existing land uses in the Milpitas Planning Area can be characterized in broad terms of residential, mixed use, institutional, commercial and office, manufacturing and industrial, and open space. Table 4.0-1 describes the existing land uses (as of 2018). The predominant land use in the Planning Area, in terms of total acreage, is Hillside Very Low Density, followed by Permanent Open Space.

Table 4.0-2 includes a comparison of existing conditions, the current General Plan Land Use Map, and the proposed General Plan Land Use Map in terms of population, housing units, nonresidential development square footage, jobs, and the jobs-to-housing ratio, as well as a calculation of annual growth rates of in comparison to the existing conditions.

TABLE 4.0-1 EXISTING LAND USES IN THE PLANNING AREA

LAND USE DESIGNATION	*PARCEL COUNT*	*ACRES (GIS)*	*PERCENT OF TOTAL ACRES (CITY)*
Boulevard Very High Density Mixed Use BVMU	22	54.09	0.44%
General Commercial GNC	121	357.52	2.91%
High Density Transit Oriented HDTOR	12	33.17	0.27%
Hillside Low Density HLD	91	391.04	3.20%
Hillside Medium Density HMD	119	239.00	1.95%
Hillside Very Low Density HVL	125	4,297.81	35.04%
Highway Service HWS	82	140.71	1.15%
Industrial Park INP	170	687.80	5.61%
Manufacturing MFG	251	661.07	5.40%
Multi-Family High Density MFH	3,366	328.76	2.70%
Multi-Family Medium Density MFM	1,624	160.92	1.31%
Mobile Home Park MHP	5	53.11	0.43%
Mixed Use MXD	120	65.23	0.53%
Professional & Administrative Office PAO	47	13.96	0.11%
Public Facilities PF	33	302.68	2.47%
Permanent Open Space POS	224	2,314.96	18.87%
Residential Retail High Density Mixed Use RRMU	1	5.01	0.04%
Retail Subcenter RSC	48	62.27	0.51%
Single Family Low Density SFL	9,638	1,495.78	12.20%
Single Family Medium Density SMD	1,629	171.43	1.40%
Town Center TWC	461	135.97	1.11%
Urban Residential URR	15	25.27	0.21%
Multi-Family Very High Density VHD	1,251	149.24	1.22%
Waterway WW	41	43.84	0.36%
Right-Of-Way ROW	44	70.58	0.58%
Total	**19,540**	**12,266.61**	**100.00%**

SOURCE: MILPITAS GIS DATASET, DE NOVO PLANNING GROUP 2018.

TABLE 4.0-2: COMPARATIVE GROWTH PROJECTIONS, CURRENT GENERAL PLAN LAND USE MAP AND DRAFT LAND USE MAP

	POPULATION	HOUSING UNITS	NONRESIDENTIAL SQUARE FOOTAGE	JOBS	JOBS PER HOUSING UNIT
EXISTING CONDITIONS					
Planning Area	76,057	22,215	28,007,888	47,538	2.14
NEW GROWTH POTENTIAL					
Current General Plan	31,722	9,469	6,452,761	10,181	1.08
Proposed Land Use Map	37,473	11,186	19,729,648	36,795	3.29
TOTAL GROWTH: EXISTING PLUS NEW GROWTH POTENTIAL					
Current General Plan	107,779	31,684	34,460,649	57,719	1.82
Proposed Land Use Map	113,530	33,401	47,737,536	84,333	2.52
DIFFERENCE IN TOTAL GROWTH					
Proposed Land Use Map – Current General Plan	+5,751	+1,717	+13,276,887	+26,614	+0.7

SOURCE: Santa Clara County Assessor 2017; California Department of Finance 2017; U.S Census OnTheMap; ESRI 2017, De Novo Planning Group 2019.

Proposed land uses in the Milpitas Planning Area are shown in Table 4.0-3. Table 4.0-3 breaks down the Planning Area Buildout Potential by General Plan Land Use Designation, including acres assigned to each land use and associated housing units, population growth, non-residential building square footage, and jobs at buildout. Table 4.0-4 quantifies how the Planning Area Buildout Potential for the General Plan Update compares to the Planning Area Buildout Potential under the City's Current General Plan.

TABLE 4.0-3: PLANNING AREA BUILDOUT (EXISTING ASSESSED CONDITIONS PLUS NEW DEVELOPMENT ALLOWED UNDER THE PROPOSED GENERAL PLAN)

LAND USE DESIGNATION	TOTAL ACRES	HOUSING UNITS AT BUILDOUT*	POPULATION GROWTH AT BUILDOUT**	NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT*
RESIDENTIAL LAND USES				
HVL - Hillside Very Low Density	4,297.81	229	767.15	72,858.00
HLD - Hillside Low Density	391.04	180	603	80,557.00
HMD- Hillside Medium Density	239.00	183	613.05	27,150.00
LDR - Low Density Residential	1,491.96	9,778	32756.3	17,272.00
MDR - Medium Density Residential	305.14	3,187	10676.45	301,019.00
HDR - High Density Residential	229.74	4,171	14206.85	--
VHDR- Very High Density Residential	21.79	723	2656.05	--
MHP - Mobile Home Park	53.11	180	603	--
Subtotal	*7,029.59*	*18,631*	*62,882*	*498,856*
MIXED-USE LAND USES				
NCMU - Neighborhood Commercial Mixed Use	140.34	1,578	5520.3	3,207,387.98

LAND USE DESIGNATION	*TOTAL ACRES*	*HOUSING UNITS AT BUILDOUT**	*POPULATION GROWTH AT BUILDOUT***	*NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT**
TWC - Town Center	133.58	1,064	3798.4	1,681,833.63
VHDMU - Very High Density Mixed Use	3.00	269	1135.15	--
Subtotal	*276.92*	*2,911*	*10,454*	*4,889,222*
COMMERCIAL LAND USES				
GNC - General Commercial	155.35	--	--	4,518,763.25
NC - Neighborhood Commercial	27.28	--	--	338,544.29
Subtotal	*182.63*	--	--	*4,857,308*
MANUFACTURING AND INDUSTRIAL BUSINESS LAND USES				
INP- Industrial Park	224.82	--	--	5,689,027.67
MFG - Manufacturing	505.74	--	--	9,216,459.99
BPRD - Business Park/Research & Development	630.88	--	--	14,590,810.75
Subtotal	*1,361.44*	--	--	*29,496,298*
SPECIFIC PLAN				
MSP - Midtown Specific Plan	496.64	3,838	13,091	3,440,982.02
TASP - Transit Area Specific Plan	366.20	8,020	27,103	4,554,870.47
Subtotal	*862.84*	*11,859*	*40,195*	*7,995,852*
LIMITED DEVELOPMENT PUBLIC/QUASI PUBLIC AND ROW LAND USES				
PF - Public Facilities	229.60	1	3	--
POS - Permanent Open Space	2,285.45	--	--	--
ROW	60.83	--	--	--
WW - Waterway	37.82	1	3	--
Subtotal	*2,613.70*	*2*	*6*	--
Totals	**12,327**	**33,401**	**113,530**	**47,737,536**

*SOURCE: DE NOVO PLANNING GROUP, 2019 * EXISTING UNITS AND NON-RESIDENTIAL SQ. FT FOR LAND USES THAT CHANGED USE OR WERE CONSOLIDATED ARE CARRIED FORWARD WITHIN THE UPDATED LAND USE FOR FUTURE BUILDOUT ESTIMATE PURPOSES. ** POPULATION ASSUMED A HH SIZE OF 3.35 ACROSS ALL UNIT TYPES AND MOST NEW UNITS ARE MF AND MIXED-USE UNITS WHICH MAY REDUCE HH SIZE OVER TIME.*

TABLE 4.0-4: POTENTIAL NEW GROWTH IN PLANNING AREA OVER EXISTING CONDITIONS

LAND USE DESIGNATION	*TOTAL ACRES*	*NEW HOUSING UNITS AT BUILDOUT*	*NEW POPULATION GROWTH AT BUILDOUT*	*NEW NON-RESIDENTIAL BUILDING SQUARE FOOTAGE AT BUILDOUT*
RESIDENTIAL LAND USES				
HVL - Hillside Very Low Density	4,297.81	193	646	--
HLD - Hillside Low Density	391.04	127	425	--
HMD- Hillside Medium Density	239.00	78	262	--
LDR - Low Density Residential	1,491.96	186	621	--
MDR - Medium Density Residential	305.14	63	210	--
HDR - High Density Residential	229.74	364	1,218	--
VHDR- Very High Density Residential	21.79	64	214	--
MHP - Mobile Home Park	53.11	--	--	--
Subtotal	*7,029.59*	*1,075*	*3,596*	--
MIXED-USE LAND USES				
NCMU - Neighborhood Commercial Mixed Use	140.34	1,578	5,285	3,207,388
TWC - Town Center	133.58	535	1,791	434,872
VHDMU - Very High Density Mixed Use	3.00	269	901	--
Subtotal	*276.92*	*2,382*	*7,977*	*3,642,260*
COMMERCIAL LAND USES				
GNC - General Commercial	155.35	--	--	(139,676)
NC - Neighborhood Commercial	27.28	--	--	338,544
Subtotal	*182.63*	--	--	*198,868*
MANUFACTURING AND INDUSTRIAL BUSINESS LAND USES				
INP- Industrial Park	224.82	--	--	(3,305,911)
MFG - Manufacturing	505.74	--	--	1,953,074
BPRD - Business Park/Research & Development	630.88	--	--	14,590,811
Subtotal	*1,361.44*	--	--	*13,237,974*
SPECIFIC PLAN				
MSP - Midtown Specific Plan	496.64	1,435	4,807	1,434,598
TASP - Transit Area Specific Plan	366.20	6,296	21,092	1,215,948
Subtotal	*862.84*	*7,731*	*25,899*	*2,650,546*
LIMITED DEVELOPMENT PUBLIC/QUASI PUBLIC AND ROW LAND USES				
PF - Public Facilities	229.60	--	--	--
POS - Permanent Open Space	2,285.45	--	--	--
ROW	60.83	--	--	--
WW - Waterway	37.82	--	--	--
Subtotal	*2,613.70*	--	--	--
Totals	**12,327**	**11,186**	**37,473**	**19,729,648**

SOURCE: DE NOVO PLANNING GROUP, 2019

Much like the existing General Plan Land Use Map, under the proposed Land Use Map, predominant land uses within the Planning Area, in terms of total acreage, remain open space and residential, ranging from the Hillside Very Low to Very High density ranges.

CUMULATIVE EFFECTS OF THE PROJECT

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. Section 15130 of the CEQA Guidelines requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines 15130[b]).

In order to assess cumulative impacts, an EIR must analyze either a list of past, present, and probable future projects (referred to as the “list approach”) or a summary of projections contained in an adopted general plan or related planning document (referred to as the “projection method”). Because of the programmatic nature of the Milpitas General Plan, this Draft EIR uses the **projection method** for the cumulative analysis and considers buildout of the proposed General Plan in addition to buildout of the other General Plans within Santa Clara County, as well as the City of Fremont which borders the City to the north. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency for that specific project. The General Plans considered as part of this cumulative analysis include those for all jurisdictions in the County of Santa Clara, including:

- City of Fremont
- County of Santa Clara
- City of Santa Clara
- City of San Jose
- City of Sunnyvale
- City of Palo Alto
- City of Cupertino
- City of Gilroy
- City of Mountain View
- City of Morgan Hill
- City of Los Gatos
- City of Los Altos
- City of Los Altos Hills
- City of Campbell
- City of Saratoga
- City of Monte Sereno

The Projection Method serves as a guide to determine if the General Plan Update is consistent with the long-term population, employment, and household projections of the region. If the proposed

General Plan Update is generally consistent with regional projections, then it would also generally be consistent with regional efforts to address environment problems such as air quality and traffic.

Cumulative Impacts

Cumulative impacts for most issue areas are not quantifiable and are therefore discussed in general qualitative terms as they pertain to development patterns in the surrounding region. An exception to this is a topic like traffic, which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. In consideration of the cumulative scenario described above, the proposed project may result in the following cumulative impacts.

AESTHETICS AND VISUAL RESOURCES

Impact 4.1: Cumulative degradation of the existing visual character of the region (Less than Cumulatively Considerable)

While the Milpitas Planning Area contains numerous areas and viewsheds with relatively high scenic value, there are no officially designated scenic vista points in the Planning Area. Additionally, as described in Chapter 3.1, there are no officially designated scenic highways located in the vicinity of Milpitas. Significant visual resources in the Planning Area include the Mission Hills and Monument Peak (elevation 2,594 feet) which form a distinctive scenic backdrop to the city.

The most significant visual feature outside the Milpitas Planning Area is Mount Diablo to the northeast in Contra Costa County. Rising to an elevation of 3,849 feet above mean sea level, Mount Diablo is a prominent landmark dominating the skyline. Milpitas' image is of an urban community located at the foot of a significant section of the Mount Diablo Range. The foothills, sparsely settled, represent a semi-wilderness of rugged terrain, remote plateaus and distant views.

However, as noted in greater detail in the Project Description (Chapter 2.0), implementation of the proposed General Plan could lead to new and expanded urban and suburban development throughout the City. This new development may result in changes to the skyline throughout the Planning Area, which may obstruct or interfere with views of visual features surrounding the Planning Area. Furthermore, buildout under the proposed General Plan and implementation of the General Plan Land Use Map has the potential to result in new and expanded development along highway corridors with high scenic values, even though these corridors are not officially designated as State Scenic Highways.

While growth is anticipated to occur in the Milpitas Planning Area and within the other cities within Santa Clara County, the majority of growth is anticipated to occur in and around existing urban development. Development of land uses and associated infrastructure is planned to occur in the future to accommodate growth envisioned in the general plans that are effective within the cumulative analysis area, including Santa Clara County and the cities of San Jose, Campbell, Los Gatos, Saratoga, and Cupertino.

Regional growth has and will continue to result in a cumulative aesthetic effect by converting undeveloped land into developed and occupied areas and increasing overall levels of nighttime lighting. Cumulative development entails grading/landform alteration, the development of structures, and the installation of roadways and other infrastructure that has altered and will continue to permanently alter the region's existing visual character. This is considered a potentially significant cumulative impact. Subsequent projects implemented under the proposed General Plan would be required to be consistent with the policies and actions of the proposed General Plan and adopted regulations pertaining to aesthetics and lighting in Milpitas. With implementation of adopted policies and regulations provided in Section 3.1 (Aesthetics and Visual Resources), the proposed General Plan would not considerably contribute to permanent changes in visual character, such as obstruction of scenic views, conversion of existing visual character, and increased lighting. The policies and actions included within the General Plan would fully reduce the cumulative effect of the General Plan on visual character, to mitigate the proposed project's contribution to a less-than-significant level. Therefore, the proposed General Plan's incremental contribution to this cumulative impact would be **less than cumulatively considerable**.

AGRICULTURAL AND FOREST RESOURCES

Impact 4.2: Cumulative impact to agricultural lands and resources (Less Than Cumulatively Considerable)

There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Milpitas Land Use Map. There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Milpitas Planning Area. Furthermore, there are no lands within the Milpitas Planning Area that are currently under a Williamson Act contract. Additionally, there are no forest lands or timber lands located within the Milpitas Planning Area.

As shown on the General Plan Land Use Map (Figure 2.0-3), all of the land within the Planning Area is planned for urban development in one form or another, with the exception of areas designated for Permanent Open Space. However, because there are no lands within the Planning Area that are designated by the existing or proposed General Plan for agricultural uses, and there are no forest lands or timber lands located within the Milpitas Planning Area, the proposed General Plan's incremental contribution to this cumulative impact would be **less than cumulatively considerable.**

AIR QUALITY

Impact 4.3: Cumulative impact on the region's air quality (Less than Cumulatively Considerable)

With respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan would be required to comply with CARB, BAAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan policies and actions. The BAAQMD's most current plan is the 2017 Clean Air Plan. The 2017 Clean Air Plan includes a multi-pollutant strategy to reduce emissions and ambient concentrations of ozone, fine particulate matter, toxic air contaminants, as well as greenhouse gases. A primary goal of the 2017 Clean Air

Plan is to address public health. The 2017 Clean Air Plan addresses public health through identifying control measures to maximize the reduction in population exposure to air pollutants and by including a category titled *Land Use and Local Impacts Measures* that is intended to address localized impacts of air pollution and to help local jurisdictions to pursue transit-oriented infill development in priority areas.

The policies and actions included throughout the proposed General Plan cover the full breadth of air quality issues as recommended in the 2017 Clean Air Plan. For example, Action CON-7c requires site-specific air quality Health Risk Assessments (HRAs) for developments that would place sensitive receptors closer than 500 feet from the edge of a regional roadway facility (including I-680, I-880, and SR-237), or for development projects that would place significant point sources of air pollution such as gas station and dry cleaning facilities, or other industrial facilities that emit toxic air contaminates TACs within 500 feet of a sensitive receptor. Individual projects will be required to provide their own environmental assessments to determine local air quality emissions, toxic air contaminant emissions, and health impacts from the construction and operation of their projects, as required by Action CON-7f. Therefore, compliance with the applicable policies and programs in the proposed General Plan as well applicable BAAQMD rules and regulations, would further assist in minimizing the proposed project's contribution to air quality emissions, TACs, and health impacts.

As described in Section 2.7.1 of the BAAQMD 2017 CEQA Guidelines, a proposed plan must show that its projected vehicle miles traveled (VMT) or vehicle trips (VT) (either measure may be used) increase is less than or equal to its projected population increase over the planning period of the plan to result in a less than significant impact. As shown in Tables 3.3-4 and 3.3-5 in Section 3.3 (Air Quality), implementation of the proposed project would result in an approximately 49.7% increase in citywide VMT, compared to a 60.1% increase in combined population and jobs. The growth rate associated with the proposed General Plan is higher than the VMT increase associated with it; therefore, the proposed project would further the fundamental goals of the BAAQMD in reducing emissions of criteria pollutants associated with vehicle miles traveled, would assist the City in achieving a more balanced jobs to housing ratio, and would increase opportunities for transit ridership in Milpitas and the surrounding areas. Further, the addition of project-generated VMT would result in an approximately 3.0% decrease in total VMT per service population by 2040 compared with the General Plan VMT 2040 projections under the existing General Plan. Thus, the proposed General Plan would actually reduce its overall contribution to the region's air quality than the existing General Plan. Based on these impacts, the proposed General Plan's incremental contribute to this cumulative impact would be **less than cumulatively considerable**.

BIOLOGICAL RESOURCES

Impact 4.4: Cumulative loss of biological resources, including habitats and special status species (Less than Cumulatively Considerable)

Cumulative development anticipated throughout the greater Santa Clara County region will result in impacts to biological resources, including the permanent loss of habitat for special status species, corridor fragmentation, direct and indirect impacts to special status species, and reduction and

degradation of sensitive habitat. Biological resources are a limited resource and the cumulative loss is considered significant.

Subsequent projects implemented under the proposed General Plan would be required to be consistent with the policies and actions of the proposed General Plan. The implementation of an individual project would require a detailed and site-specific review of the site to determine the presence or absence of movement corridors, special-status species, and sensitive habitat on a given project site. If movement corridors, special-status species, or sensitive habitat are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process. However, as provided under Section 3.4 (Biological Resources), with implementation of the policies and actions included within the General Plan, implementation of the General Plan would not generate a significant impact on biological resources. Therefore, the proposed General Plan's incremental contribution to this cumulative impact would be **less than cumulatively considerable**.

CULTURAL AND TRIBAL RESOURCES

Impact 4.5: Cumulative impacts on known and undiscovered cultural resources (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan may result in the discovery and removal of cultural resources, including archaeological, historical, and Native American resources and human remains. The proposed General Plan policies and actions, as well as State and Federal regulations, will reduce the risk to resources in the region. As discussed in Section 3.5 (Cultural and Tribal Cultural Resources), each project would require specific surveys for potential resources and the evaluation of any resources discovered during construction activities. Other policies and actions designed to reduce impacts to cultural and tribal cultural resources within the Planning Area and the region as a whole are also provided in Section 3.5 (Cultural and Tribal Cultural Resources). Adherence to these policies, actions, and regulations will avoid and/or minimize a cumulative loss of these important resources if they are found during project-specific surveys or construction. Therefore, the proposed General Plan's incremental contribution to cumulative cultural resource impacts would be **less than cumulatively considerable**.

GEOLOGY AND SOILS

Impact 4.6: Cumulative impacts related to geology and soils (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan may result in risks associated with geology and soils. For example, there is an ongoing possibility that a fault located anywhere in the state (or region) could rupture and cause seismic ground shaking. Additionally, grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and

sedimentation. Other geologic risks such as liquefaction, landsliding, lateral spreading, and soil expansion are also geologic risks that are present.

While some cumulative impacts will occur in the region as individual projects are constructed, the proposed General Plan policies and actions, as well as State and Federal regulations, will reduce the risk to people in the region. Considering the protection granted by local, State, and Federal agencies and their requirements for seismic design, as discussed in Section 3.6 (Geology and Soils), the overall cumulative impact would not be significant. As a result, the proposed General Plan's incremental contribution to cumulative geologic and soil impacts would be **less than cumulatively considerable**.

GREENHOUSE GASES, CLIMATE CHANGE, AND ENERGY

Impact 4.7: Cumulative impacts related to greenhouse gases, climate change, and energy (Less than Cumulatively Considerable)

Implementation of the Milpitas General Plan would not directly result in the creation of GHG emissions. However, subsequent development allowed under the General Plan would result in new projects that would increase GHG emissions in the Milpitas Planning Area.

There are a variety of ways in which a general plan could contribute to climate change and result in the generation of GHGs. Sprawling land use patterns that place residences far from employment and retail centers can result in increased vehicle miles traveled (VMT), which increase GHG generation. The conversion of forest lands and open space areas into urbanized uses removes vegetation and trees that have positive carbon sequestration value. Imbalances between local jobs and housing can result in increased commute times and increased VMT associated with longer travel distances between home and work.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. GHG emissions are cumulative by nature, given that they spread throughout the atmosphere on a global scale. In determining the significance of a project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

As shown in Table 2.0-2 in Chapter 2.0 of this Draft EIR, buildout of the City's existing General Plan would result in a projected population of 107,779. With implementation of the proposed project, the City of Milpitas Planning Area is estimated to grow to a total population of 113,530. This is an approximately 5% increase compared to the previous population forecast. However, the land use modifications and policies proposed as part of the proposed General Plan would result in an approximately 14% reduction in per capita vehicle miles traveled compared to 2040 buildout of the existing General Plan, as shown in Table 3.14-2 in Chapter 3-14 of this Draft EIR. Additionally, the proposed General Plan would result in in an approximately 3% reduction in per service population vehicle miles traveled compared to 2040 buildout of the existing General Plan. However, overall VMT is anticipated to increase in the proposed General Plan compared with the existing General Plan (by approximately 16%). Table 3.7-1 in Chapter 3.7 provides the VMT summary for the proposed project.

According to the CARB's 2017 Climate Change Scoping Plan, the transportation sector remains the largest source of GHG emissions in the State, accounting for 37% of the inventory (CARB, 2017). A typical passenger vehicle emits approximately 4.6 metric tons of CO_2 per year (U.S. EPA, 2018). This number can vary based on a vehicle's fuel, fuel economy, and the number of miles driven per year. The 14% reduction in per capita vehicle miles traveled, and 3% reduction in per service population vehicle miles traveled (under buildout for the proposed General Plan compared with the buildout of the existing General Plan) would have a substantial reduction in per capita and per service population greenhouse gas emissions, respectively

The General Plan would reduce VMT per capita and VMT per service population, compared with the existing General Plan, in buildout year 2040. In addition, the proposed project is consistent with the existing 2013 CAP, and will also be consistent with the forthcoming update to the 2013 Milpitas CAP, ensuring consistency with a Qualified GHG Reduction Strategy. The City of Milpitas would not exceed the GHG emission targets established to ensure compliance with SB 32, AB 32, CARB's 2017 Scoping Plan and other California legislation for future year 2030 and General Plan buildout year 2040. Moreover, the proposed project includes a range of goals and policies that would reduce GHG emissions associated with future development and improvement projects. Therefore, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

As future development projects are received and reviewed by the City in subsequent years, those projects will be reviewed for consistency with the General Plan and all relevant State-level programs and requirements. All future projects must implement the most current version of the Title 24 energy efficiency requirements, as required by State law. Consistency with the General Plan and other mandatory State-level programs would ensure that future project-level contributions to global climate change would be less than significant. Moreover, as identified in Section 3.7 (Greenhouse Gases, Climate Change, and Energy), buildout of the General Plan would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As a result, the proposed General Plan's

incremental contribution to cumulative greenhouse gas, climate change, and energy impacts would be **less than cumulatively considerable**.

HAZARDS AND HAZARDOUS MATERIALS

Impact 4.8: Cumulative impacts related to hazardous materials and human health risks (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan may involve the transportation, use, and/or disposal of hazardous materials, which may involve the use of equipment that contains hazardous materials (e.g., solvents and fuels or diesel-fueled equipment), or the transportation of excavated soil and/or groundwater containing contaminants from areas that are identified as being contaminated. Furthermore, because of the regional nature of the General Plan, some future land uses will inevitably transport or use hazardous materials within ¼ mile of a school, or other sensitive receptors such as hospitals and residences.

As shown in Figure 3.8-1, the City of Milpitas and general vicinity are not categorized as "Very High" FHSZ by CalFire. State Responsibility are found to the west of the City limits in the hilly terrain within the Sphere of Influence boundary. While there are no State Responsibility areas within the Milpitas City limits, areas west of the city limits within the Sphere of Influence are designated as "high" and "moderate" FHSZ by CalFire. The proposed General Plan includes requirements for adequate water supply and water flow availability, ensuring adequate emergency access, adequate fire protection services, fire safe design site standards, and ensuring public awareness regarding fire safety. All future projects allowed under the General Plan and future projects within the cumulative analysis area would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements.

While some cumulative impacts will occur in the region as individual projects are constructed, the proposed General Plan policies and actions, as well as State and Federal regulations, will reduce the risk to people in the region. Considering the protection granted by local, State, and Federal agencies and their requirements for the use of hazardous materials in the region, as discussed in Section 3.8 (Hazards and Hazardous Materials), the overall cumulative impact for hazards impacts would not be significant. Therefore, the proposed General Plan's incremental contribution to cumulative hazards and hazardous materials impacts would be **less than cumulatively considerable**.

HYDROLOGY AND WATER QUALITY

Impact 4.9: Cumulative impacts related to hydrology and water quality. (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the proposed General Plan has the potential to result in construction-related water quality impacts, impacts to groundwater recharge, and cause flooding, erosion, or siltation from the alteration of drainage patterns.

While some cumulative impacts will occur in the region as individual projects are constructed, the proposed General Plan policies and actions, as well as State and Federal regulations, will substantially reduce the impacts. Considering the protection granted by local, State, and Federal agencies and their permit and monitoring requirements, as discussed in Section 3.9 (Hydrology and Water Quality), and with implementation of the policies and actions included within the General Plan, the overall cumulative impact would not be significant. As a result, the General Plan's incremental contribution to cumulative hydrology impacts would be **less than cumulatively considerable**.

LAND USE, POPULATION, AND HOUSING

Impact 4.10: Cumulative impacts related to local land use, population, and housing (Less than Cumulatively Considerable)

Cumulative land use and planning impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site and project-specific. It may be determined in the project-specific design phase of a development project that an individual project may require removal of homes and result in the displacement of people and housing; however, these effects are not cumulatively considerable because there is adequate replacement housing available under the proposed General Plan. Additionally, any removal of homes would require adequate compensation to the homeowner in accordance with Federal and State laws.

The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at in-fill locations within existing urbanized areas, as well as limited new growth within the Planning Area, but would not create physical division within existing communities. New development and redevelopment projects would be designed to complement the character of existing neighborhoods and provide connectivity between existing development and new development within the cumulative analysis area. The proposed General Plan does not include any new roadways, infrastructure, or other features that would divide existing communities. Moreover, with implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Lastly, General Plan implementation would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere Therefore, the proposed General Plan's incremental contribution to cumulative land use and population impacts would be **less than cumulatively considerable**.

MINERAL RESOURCES

Impact 4.11: Cumulative impacts related to mineral resources (Less than Cumulatively Considerable)

Mineral resources of significance found and extracted in Santa Clara County include construction aggregate deposits and, to a lesser extent, salts derived from evaporation ponds at the edge of San Francisco Bay.

The Planning Area contains four areas identified by the State Geologist as containing Regionally Significant Construction Aggregate Resources. These areas, located in the foothills outside City limits, are part of the South San Francisco Bay Production-Consumption Region and contain sandstone deposits. Three of the sites are located west of the Ed Levin Park along Tularcitos and Loa Caches creeks, and the fourth is along Scott Creek at the County line. All of the areas are being currently quarried.

The only known identified regional mineral resource areas within the Planning Area are already in operation and are currently quarried. The proposed General Plan does not designate new urban uses within the SOI, or include policies or actions that would limit the future potential for resource extraction from this MRZ. Proposed new urban uses available for development are within the City of Milpitas city limits and would not be developed within an identified regional mineral resource area or mining operation and therefore would not preclude mineral extraction within existing mineral resources area.

As noted above, implementation of the proposed project would not result in loss of a mineral resource. As a result, the General Plan's incremental contribution to cumulative mineral resource impacts would be **less than cumulatively considerable**.

NOISE

Impact 4.12: Cumulative impacts related to noise (Cumulatively Considerable and Significant and Unavoidable)

Chapter 3.13 (Noise) Table 3.12-12 shows the future noise levels and the increase in noise levels associated with traffic on the local roadway network under a 20-year circulation system for the proposed General Plan, versus existing conditions. Figure 3.12-3 shows future citywide traffic noise contours.

Buildout of the General Plan may contribute to an exceedance of the City's transportation noise standards and/or result in significant increases in traffic noise levels at existing sensitive receptors. As indicated by Table 3.12-12, the related traffic noise level increases with a 20-year circulation system buildout of the proposed General Plan are predicted to increase between 0.5 to 3.5 dB versus existing conditions.

General Plan Policies N 1-1 through N 1-7, N 1-9, N 1-10 and Actions N 1a, N 1b, N 1e, N 1f, N 1g, N 1h, 1i, and 1k, are intended to minimize exposure to excessive noise, including noise associated with traffic. Specifically, Policies N 1-1 and N 1-2 support noise-compatible land uses in the vicinity of traffic noise sources and require that new development and infrastructure projects be reviewed for consistency with the noise standards established in Tables N-1 and N-2. The proposed General Plan standards required under Policy N 1-1 and N 1-2, for exposure to traffic noise shown in Table 3.12-12, meet or exceed the noise level standards of the adopted General Plan shown in Table 3.12-8. Policy N 1-2 and Actions N 1a and N 1b would ensure that new development mitigates potential noise impacts through incorporating the noise control treatments necessary to achieve acceptable noise levels. Policy N 1-6 sets criteria for evaluating future increases in traffic noise levels. Action N

1i and N 1k would ensure that the Municipal Code, including the updated noise ordinance, is consistent with the noise standards established in the General Plan. Action N 1e would encourage working with Caltrans to ensure that adequate noise studies are prepared and that noise mitigation measures are considered in State transportation projects. Implementation of the proposed policies and actions of the General Plan will reduce noise and land use compatibility impacts from vehicular traffic noise sources and would ensure that new development is designed to include noise-attenuating features. As shown in Table 3.12-12, the traffic noise increases associated with the proposed General Plan exceed the applicable noise exposure criteria. Therefore, the proposed General Plan would have a **significant and unavoidable** and **cumulatively considerable contribution** relative to traffic noise on existing noise-sensitive uses in the City.

PUBLIC SERVICES AND RECREATION

Impact 4.13: Cumulative impacts to public services and recreation (Less than Cumulatively Considerable)

Development accommodated under the General Plan would result in additional residents and businesses in the City, including new residential, industrial, office, and commercial uses. As described in Chapter 2.0 (Project Description), buildout of the General Plan could yield a total of up to 33,401 housing units, a population of 113,530 people, 47,807,536 square feet of non-residential building square footage, and 84,333 jobs within the Planning Area.

As shown in Table 2.0-3 of Chapter 2.0 (Project Description), this represents development growth over existing conditions of up to 11,186 new housing units, 37,473 people, 19,729,648 square feet of new non-residential building square footage and 36,795 jobs.

Development and growth facilitated by the General Plan would result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. The General Plan includes policies and actions to ensure that public services are provided at acceptable levels and to ensure that development and growth does not outpace the provision of public services.

Cumulative growth that would occur within Santa Clara County and other cities within Santa Clara County over the life of the proposed General Plan will result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. As the demand for public services and recreation increases, there will likely be a need to address acceptable service ratios, response times, and other performance standards. New or expanded service structures (e.g., offices, maintenance and administrative buildings, schools, parks, fire facilities, libraries, etc.) will be needed to provide for adequate staffing, equipment, and appropriate facilities to serve growth within the cumulative analysis area.

New facilities will be needed to serve growth contemplated in the General Plan. The environmental effect of providing the public services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan does not propose or authorize development nor does

it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the governmental facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. These impacts are described in the relevant chapters (Chapters 3.1 through 3.16, and 4.0) of this Draft EIR. Any future development under the General Plan would be required to comply with regulations, policies, and standards included in the General Plan, and would be subject to CEQA review as appropriate.

The General Plan includes a range of policies and actions that would ensure that public services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development funds its fair share of services. The General Plan includes policies to ensure that fire protection and law enforcement services keep pace with new development and that school, library, and governmental services are adequately planned and provided. Payment of applicable impact fees, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the future projects, would ensure that the City maintains acceptable service ratios. The proposed General Plan's incremental contribution to cumulative public services and recreation impacts would be **less than cumulatively considerable**.

TRANSPORTATION AND CIRCULATION

Impact 4.14: Cumulative impacts on the transportation network (Cumulatively Considerable and Significant and Unavoidable)

Under Cumulative Plus Plan conditions, the plan area would generate approximately 80,725 net new daily trips on a typical weekday. As described in Section 3.14 (Transportation and Circulation), the average residential and employment VMT under the previous General Plan and the proposed General Plan Update for the City of Milpitas are shown in Table 3.14-2 of Section 3.14 (Transportation and Circulation), as reproduced below in Table 4.0-5. As shown below, average residential VMT per capita is expected to decrease by 14.3% and work-based VMT per employee is expected to slightly increase by approximately 0.19% under the proposed General Plan Update.

TABLE 4.0-5: CUMULATIVE (2040) VMT COMPARISON

VMT METRIC	*EXISTING GENERAL PLAN VMT ESTIMATE*	*PROPOSED GENERAL PLAN VMT ESTIMATE*	*CHANGE IN VMT*
Average Residential VMT per Capita	12.87	11.03	-14.3%
Average Employment VMT per Employee	20.37	20.41	+0.2%

SOURCE: VTA, KITTLESON & ASSOCIATES, 2020

Because the City of Milpitas has not yet adopted standards of significance for evaluating VMT, guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018, was used. For the purposes of this analysis, the average VMT per capita resulting from buildout of the General Plan was assessed using a significance threshold based on the countywide average for Santa Clara County, which is slightly lower than Milpitas's existing VMT per capita, and therefore

reflects the more rigorous of the two potential VMT thresholds. A summary of the VMT analysis is shown in Table 3.14-1 of Section 3.14 (Transportation and Circulation), and is reproduced in Table 4.0-6 below.

TABLE 4.0-6: VEHICLE MILES TRAVELED ANALYSIS

VMT METRIC	*CITY OF MILPITAS 2040 PLUP*	*2020 SANTA CLARA COUNTY BASELINE*	*THRESHOLD OF SIGNIFICANCE*	*PERCENT CHANGE*	*SIGNIFICANT IMPACT?*
Average Residential VMT per Capita	11.03	13.33	11.48	-17%	No
Average Employment VMT per Employee	20.41	16.64	14.14	+23%	Yes

SOURCE: KITTELSON & ASSOCIATES, INC., 2020

The projected VMT per employee for the City of Milpitas is nearly 31 percent higher than the applied significance threshold. The proposed General Plan land use patterns and intensities, as well as its proposed policies, include a multitude of components that will reduce VMT. Individual development projects will also be required to completed VMT analyses based on forthcoming VMT policies and thresholds to be established by the City of Milpitas, including transportation demand management (TDM) measures designed to reduce employment based VMT. While such measures are likely to result in less-than-significant VMT impacts when considered at an individual project level, they cannot be guaranteed and are not possible to fully quantify or mitigate at a Citywide level as part of a programmatic General Plan, particularly given the 31 percent reduction needed to reach the applied significance threshold. As a result, this is considered a **cumulatively considerable and significant and unavoidable** impact.

UTILITIES

Impact 4.15: Cumulative impacts related to utilities (Less than Cumulatively Considerable)

Cumulative growth that would occur within the service areas for the SFPUC and the SCVWD over the life of the proposed General Plan will result in increased demand for water service, sewer service, and solid waste disposal services.

Water: Table 3.15-3 summarizes annual projections of demands and supplies to meet those demands through 2040, as documented by West Yost Associates. The proposed General Plan includes a range of policies and actions designed to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. Given that projected water demands associated with General Plan buildout would not exceed the projected available water (including after taking into account future development within Santa Clara County, neighboring cities, and the broader region), and that the proposed General Plan includes a

comprehensive set of goals, policies and actions to ensure an adequate and reliable source of clean potable water, impacts associated with water supplies are less than significant.

Additionally, future development in the Planning Area would be required to connect to existing water distribution infrastructure in the vicinity of each site, pay the applicable water system connection fees, and pay the applicable water usage rates. Future projects may be required to implement site specific and limited off-site improvements to the water distribution system in order to connect new project sites to the City's existing water infrastructure network. The specific impacts of providing new and expanded waster distribution infrastructure cannot be determined at this time, as the General Plan does not propose any specific development projects or include details on any future development projects. However, any future improvements to the existing water distribution infrastructure would be primarily provided on sites with land use designations that allow for urbanized land uses, and the environmental impacts of constructing and operating the new water distribution infrastructure would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the proposed General Plan.

This Draft EIR addresses the potential impacts of development that may occur under the proposed General Plan, including residential, commercial, professional office, business park, light industrial, public facilities, and a range of other uses. As shown in Table 3.15-3 and discussed in Impact 3.15-1, the City projects combined supplies from the San Francisco Public Utilities Commission (SFPUC) and Valley Water (VW) to be approximately 14.5 mgd in 2025. By 2040, the buildout time horizon in the 2020 WMPU, combined SFPUC and VW supplies are projected to be over 17.5 mgd. The project's buildout potable water demands to be approximately 13.7 mgd including the future growth areas (13.4 mgd without the future growth areas)[1]. Thus, the SFPUC and the SCVWD have adequate future supplies available to meet projected demand increases throughout their respective service areas through the year 2040.

Given that projected water demands associated with General Plan buildout would not exceed the projected water supplies, and that the proposed General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable source of clean potable water, impacts associated with water supplies are **less than cumulatively considerable.**

Wastewater: Currently, all wastewater collected from the City is treated at the San Jose-Santa Clara Regional Wastewater Facility (RWF). The RWF receives and treats wastewater from a total of eight municipalities in the South Bay, including San Jose (via the Burbank Sanitary District and County Sanitation District 2-3), Saratoga, Campbell, Los Gatos, Monte Sereno (via the West Valley Sanitation District), Santa Clara, Milpitas, and Cupertino.

The City's owns and operates its own collection system, including 17,000 main sewer connections, 175 miles of gravity pipe, 5 miles of force main, and two pump stations. The Venus Pump Station, with a capacity of 1.6 mgd, serves around 1,200 homes in the low-lying Pines Neighborhood. The Main Sewer Station has a capacity of 45 mgd, which pumps sewage through 2.5 miles of dual force

[1] West Yost. 2020. *Milpitas General Plan Update Buildout Water Demands and Wastewater Flows*.

main to the RWF. (Milpitas, 2014). The RWF has a wastewater treatment capacity of 167 mgd and current flows to the plant are about 110 mgd (San Jose, 2015a). The City recently purchased an additional 1.0 mgd of capacity at the plant from West Valley Sanitation District and 0.75 mgd of capacity from Cupertino Sanitary District to bring the City's total contracted peak week flow capacity at the RWF to 14.25 mgd. The 2015 peak dry weather flow to the plant was 96.15 mgd, with 6.71 mgd attributed to the City (San Jose, 2015b). Thus, there is current available capacity of 7.54 mgd for future wastewater flows.

As Milpitas continues to develop in the future, there will be an increased need for water and wastewater services, including a reliable source of recycled water. These needs have been addressed in the district's master plans and will require that the Districts, in coordination with the City, continue to implement phased improvements to some pump stations, sewer mains, and the various wastewater treatment plants when triggered by growth.

Applying Use Factor's (UF) from the 2009 Sewer Master Plan Update factors to the buildout GPLU yields a buildout average dry weather flow (ADWF) of approximately 11.8 mgd. Below the City's current capacity rights of 14.25 mgd[2]. The City may or may not need to purchase additional capacity during the 20-year timeframe of the proposed Plan, depending on the pace of growth and whether full buildout as allowed under the General Plan occurs.

Given that projected wastewater generation volumes associated with General Plan buildout would not exceed the projected wastewater generation volumes and that the proposed General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable wastewater collection and treatment system, impacts associated with wastewater treatment and compliance with waste discharge requirements are less than significant**.** The proposed General Plan's incremental contribution to cumulative wastewater impacts would be **less than cumulatively considerable**.

Stormwater: Development under the proposed General Plan would result in increased areas of impervious surfaces throughout the Planning Area, resulting in the need for additional or expanded stormwater drainage, conveyance, and retention infrastructure. The infrastructure and facilities necessary to serve new growth would involve development of some facilities on-site within new development projects, some facilities off-site on appropriately designated land, and may also involve improvements to existing facilities and disturbance of existing rights-of-way.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations.

[2] West Yost. 2020. *Milpitas General Plan Update Buildout Water Demands and Wastewater Flows.*

Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

With the policies and actions listed in Section 3.15 (Utilities) would ensure that there is adequate stormwater drainage and flood control infrastructure to serve future development under the General Plan, and would ensure that future drainage and flood control infrastructure projects do not result in adverse environmental impacts. The proposed General Plan's incremental contribution to cumulative wastewater impacts would be **less than cumulatively considerable**.

Solid Waste: Development under the proposed General Plan may increase the population within the Planning Area at buildout to approximately 113,530 persons. As described above, the City of Milpitas disposed of 63,655 tons of solid waste in 2018 achieving a disposal rate of 4.1 PPD per resident. Assuming these disposal rates remain constant throughout the life of the General Plan, the new growth under General Plan buildout would result in an increase of approximately 198,606.9 pounds per day of solid waste, which equals 90.1 tons per day or 32,886.5 tons of solid waste per year.

The City's projected increase in solid waste generation associated with future buildout of the proposed General Plan is well within the permitted capacity of the Newby Island Landfill. According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Facility Permit (43-AN-0003), as of December 2014, the remaining capacity of the landfill's disposal area is estimated at 57.5 million cubic yards with a current maximum permitted throughput of 4,000 tons of waste per day and an estimated closing date for the landfill of 2041. Thus, the Newby Island Landfill has capacity to serve buildout of the proposed General Plan.

Future projects within the Planning Area would be required to comply with applicable state and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. While there is adequate permitted landfill capacity to accommodate future growth, the proposed General Plan includes actions to further reduce the project's impact on solid waste services. The General Plan would not exceed the permitted capacity of the landfill serving the City, and the General Plan complies with regulations related to solid waste. The proposed General Plan's incremental contribution to cumulative solid waste impacts would be **less than cumulatively considerable**.

WILDFIRE

Impact 4.16: Cumulative impact related to wildfire (Less than Cumulatively Considerable)

The General Plan ensures that the City's emergency access routes, emergency contact lists, and public information regarding designated facilities and routes are regularly reviewed to ensure that up to date information is available to the City and the public in the event of an emergency. Important new critical facilities would also be located to ensure resiliency and functionality in the event of a natural disaster. Implementation of the General Plan would have a less than significant impact with regard to this issue.

No specific aspect as a result of implementation of the General Plan will substantially alter the slope, prevailing winds, or other factors that would increase exposure to Milpitas residents, employees or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. General Plan implementation would not exacerbate wildfire risks in VHFHSZs; therefore, these impacts would be less than significant.

Furthermore, the Milpitas General Plan is a long range policy document that does not include site specific designs or proposals, and does not propose any entitlements for development. The majority of all future development would occur within existing developed areas. However, future development may require the limited extension and development of infrastructure such as roads, water and sewer utilities, and fuel breaks into areas designated as High FHSZ's. The potential for future projects to impact environmental resources to meet compliance with fire development standards such (as fuel breaks and clearance requirements) would require site specific environmental require under CEQA to identify any site-specific impacts. As demonstrated throughout this EIR, implementation of the various policies and actions contained in the General Plan would reduce potential impacts associated with the construction and expansion of infrastructure. Implementation of the General Plan policies and actions combined with local and state requirements, as discussed previously, would ensure that potential wildland fire hazards would not be exacerbated by local infrastructure, and this impact would be considered **less than significant**.

Lastly, while the City cannot state with certainty that future risks associated with post-fire flooding and debris flow would not occur in Milpitas, implementation of the General Plan would not exacerbate this risk. Implementation of Action PS-2a would reduce this risk to the greatest extent feasible, resulting in an impact that is less than significant as a result of adoption and implementation of the proposed General Plan. Implementation of the policies and actions provided in Section 3.16 (Wildfire) would ensure that the proposed General Plan's incremental contribution to cumulative solid waste impacts would be **less than cumulatively considerable**.

4.2 GROWTH-INDUCING EFFECTS

INTRODUCTION

Section 15126.2(e) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth…It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.*

Based on the CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth

inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand *(Napa Citizens for Honest Government v. Napa County Board of Supervisors)*. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

The General Plan is a long-term plan intended to accommodate projected population, housing, and employment growth, including the appropriate balance among these factors with the necessary public services and infrastructure. The proposed General Plan would serve as a comprehensive, long-term plan for the physical development of Milpitas. Projected growth is described in Section 3.10 (Land Use and Population), and the environmental consequences related to the potential growth are fully assessed in each topical section. By definition, the proposed Milpitas General Plan is intended to provide for and address future growth in the City.

Because the proposed General Plan provides a framework for development through its Land Use Map, land use designations, goals, policies, and actions, it would directly induce population and employment growth in the Milpitas Planning Area by designating land for development that is more intense, in some instances, than current designations allow. The analysis of the indirect growth-inducing impacts for the proposed General Plan focuses on the following factors: inducement of unanticipated population growth; encouragement of economic growth that leads to jobs and housing growth; elimination of obstacles to population growth; and resulting service, facility, or infrastructure demands in excess of existing and planned growth.

The proposed General Plan accommodates future growth in Milpitas, including new businesses, expansion of existing businesses, and new residential uses. Infrastructure and services would need

to accommodate future growth. The General Plan is oriented toward the economic growth of the City, with emphasis given to encouraging development of a broader array of businesses, increasing local employment opportunities, and providing residential development as necessary to serve economic growth. The cumulative development scenario addressed in this Draft EIR is the maximum projected development that could occur within the existing city limits and the Planning Area, if every parcel in the city and the Planning Area developed at or near the higher end of densities and intensities allowed under the proposed General Plan.

As shown in Table 2.0-3, buildout of the General Plan could yield up to 11,186 new housing units, and 19,729,648 square feet of new non-residential building square footage within the Planning Area. Depending on growth rates, the actual growth during the life of the General Plan could be lower or higher, but would not exceed the theoretical maximum buildout described in Chapter 2.0.

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire state, is inevitable. The primary factors that account for population growth are natural increase and net migration. The average annual birth rate for California is expected to be 20 births per 1,000 population. Additionally, California is expected to attract more than one third of the country's immigrants. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. While these factors would likely result in growth in Milpitas during the planning period of the proposed General Plan, growth will continue to occur based primarily on the demand of the housing market and demand for new commercial, industrial, and other non-residential uses. As future development occurs under the proposed General Plan, new roads, infrastructure, and services would be necessary to serve the development and this infrastructure would accommodate planned growth. However, growth under the proposed General Plan would remain within the general growth levels projected statewide and would not be anticipated to exceed any applicable growth projections or limitations that have been adopted to avoid an environmental effect. The proposed General Plan is intended to accommodate the City's fair share of statewide housing needs, based on regional numbers provided by the California Department of Housing and Community Development on a regular basis (every five to eight years).

The proposed General Plan includes policies and actions that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality. Additionally, this Draft EIR identifies General Plan policies and actions, where appropriate, that would serve to reduce or eliminate potentially significant impacts associated with specific environmental issues associated with growth. Chapters 3.1 through 4.0 provide a discussion of environmental effects associated with development allowed under the proposed General Plan.

With implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Therefore, population and housing growth associated with the proposed General Plan would result a **less than significant** impact.

4.3 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

CEQA Section 15126.2(d) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), requires that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Consumption of Nonrenewable Resources

Consumption of nonrenewable resources refers to the loss of physical features within the natural environment, including the conversion of agricultural lands, loss of access to mining reserves, and nonrenewable energy use. The Milpitas Planning Area has multiple nonrenewable resources, including biological resources, water resources, and energy resources.

One of the objectives of the proposed General Plan is to conserve natural resources within the Planning Area. Many of these policies and actions, aimed at preserving natural resources, are contained within the Conservation and Sustainability Element, and have been identified throughout this EIR. Additionally, the proposed General Plan directs most new development to infill areas, and areas surrounding existing neighborhoods and urbanized areas. As a result, the proposed General Plan will minimize the potential for impacts to the nonrenewable resources in the Planning Area, including biological resources, water resources, and energy resources, to the greatest extent feasible. More detailed and focused discussions of potential impacts to these nonrenewable resources are contained throughout this Draft EIR.

Nonrenewable energy resources such as electricity, natural gas, propane, gasoline, and diesel would be consumed during the construction and operation of development projects contemplated under the General Plan buildout. The proposed General Plan includes a variety of policies that seek to conserve, protect, and enhance energy resources. These policies focus on energy efficiency in the design, materials, construction, and use of buildings, the use of alternative energy systems, and alternative transportation modes. As described in Chapter 3.7 (Greenhouse Gases, Climate Change

and Energy), the proposed General Plan would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for during General Plan buildout, including during construction, operations, maintenance, and/or removal.

Irretrievable Commitments/Irreversible Physical Changes

The implementation of the General Plan would not be expected to result in environmental accidents that have the potential to cause irreversible damage to the natural or human environment through environmental accidents. While activities anticipated to occur under the General Plan would result in the limited use, transport, storage, and disposal of hazardous materials, all activities would comply with applicable state local, and federal laws related to hazardous materials transport, use, and storage, which would significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage. Implementation of the proposed General Plan would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the General Plan would result in irretrievable commitments by introducing development onto sites that are presently undeveloped. The conversion of undeveloped lands to urban uses would result in an irretrievable loss of undeveloped land, wildlife habitat, and open space. Additionally, development will physically change the environment in terms of aesthetics, air emission, noise, traffic, open space, and natural resources. These physical changes are irreversible after development occurs.

Therefore, the proposed General Plan would result in changes in land use within the Planning Area that would commit future generations to these uses.

Impact 4.17: Irreversible effects (Significant and Unavoidable)

In summary, the proposed General Plan includes an extensive policy framework that is designed to address land use and environmental issues to the greatest extent feasible, while allowing growth and economic prosperity for the City. However, even with the policies and actions that will serve to reduce potential significant impacts, the proposed General Plan will result in significant irreversible changes. This impact is considered a **significant and unavoidable** impact under CEQA.

4.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the General Plan are discussed in Chapter 3 and previously in this chapter (cumulative-level). Refer to those discussions for further details and analysis of the significant and unavoidable impacts identified below:

- **Impact 3.12-1:** General Plan implementation may result in exposure to significant traffic noise sources (Significant and Unavoidable)
- **Impact 3.14-2:** General Plan implementation would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a) (Significant and Unavoidable)
- **Impact 4.12:** Cumulative impacts to Noise (Cumulatively Considerable and Significant and Unavoidable)
- **Impact 4.14:** Cumulative impacts on the transportation network (Cumulatively Considerable and Significant and Unavoidable)
- **Impact 4.17:** Irreversible Effects (Significant and Unavoidable)

5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all of the project objectives while potentially reducing or avoiding one or more environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

Alternatives that are evaluated in the EIR must be potentially feasible alternatives. However, not all possible alternatives need to be analyzed. An EIR must "set forth only those alternatives necessary to permit a reasoned choice." (CEQA Guidelines, Section 15126.6(f).) The CEQA Guidelines provide a definition for a "range of reasonable alternatives" and, thus limit the number and type of alternatives that need to be evaluated in an EIR. An EIR need not include any action alternatives inconsistent with the lead agency's fundamental underlying purpose in proposing a project. (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1166.)

First and foremost, alternatives in an EIR must be potentially feasible. In the context of CEQA, "feasible" is defined as:

> *… capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.* (CEQA Guidelines 15364)

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

FACTORS GUIDING SELECTION OF ALTERNATIVES

A Notice of Preparation was circulated to the public to solicit recommendations for a reasonable range of alternatives to the proposed project. Additionally, a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review and comment period.

The alternatives to the General Plan Update selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the project, and address public and elected officials' input with respect to potential land use and growth scenarios that may be appropriate for consideration as part of the General Plan Update. Significant impacts are summarized in Chapter 4.0 and described in greater detail in Sections 3.1 through 3.16. As described in Chapter 2.0 (Project Description), the following objectives have been identified for the proposed project:

1. Protect and enhance Milpitas's community character, and sense of community;

2. Provide a range of high-quality housing options;
3. Attract and retain businesses and industries that provide high-quality and high-paying jobs;
4. Expand and improve neighborhood serving shopping areas to provide better local services near neighborhoods, and increased sales tax revenues;
5. Continue to maintain and improve multimodal transportation opportunities;
6. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
7. Address new requirements of State law; and
8. Address emerging transportation, housing, and employment trends.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The proposed General Plan Update would result in the following significant and unavoidable impacts, which are described in Sections 3.1 through 3.16 and Chapter 4.0:

- **Impact 3.12-1:** General Plan implementation may result in exposure to significant traffic noise sources (Significant and Unavoidable)
- **Impact 3.14-2:** General Plan implementation would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (a) (Significant and Unavoidable)
- **Impact 4.12:** Cumulative impacts to Noise (Cumulatively Considerable and Significant and Unavoidable)
- **Impact 4.14:** Cumulative impacts on the transportation network (Cumulatively Considerable and Significant and Unavoidable)
- **Impact 4.17:** Irreversible Effects (Significant and Unavoidable)

ALTERNATIVES TO THE GENERAL PLAN UPDATE

Three alternatives to the General Plan Update were considered based on the analysis performed to identify the environmental effects of the proposed project. Since the General Plan Update was prepared with the intent to be a self-mitigating document, project alternatives focused on amending land uses and standards to potentially address impacts. The alternatives analyzed in this EIR include the following:

- **Alternative 1: No Project Alternative**. Under Alternative 1, the City would not adopt the General Plan Update. The existing Milpitas General Plan would continue to be implemented and no changes to the General Plan, including the Land Use Map, Circulation Diagram, goals, policies, or actions would occur. Subsequent projects, such as amending the Municipal Code (including the zoning map) and the City's Design Guidelines, would not occur. The Existing General Plan Land Use Map is shown on Figure 5.0-1.

- **Alternative 2: Modified Project Alternative**. Under Alternative 2, the City would adopt the updated General Plan policy document, but would retain the existing land use map. This alternative would result in the same growth as the existing General Plan and

Alternative 1, but would implement the updated goals, policies, and actions found in the General Plan Update. This Alternative would result in less residential and non-residential growth than the proposed project or Alternative 3. This alternative was developed to potentially reduce the severity of significant impacts associated with noise, as well as the potential further reduction in less than significant impacts related to aesthetics, biological resources, cultural resources, noise, public services, air quality and utilities.

- **Alternative 3: Increased Residential Density Alternative**. Alternative 3 would adopt the General Plan Update, including the proposed General Plan Land Use Map and updated goals, policies, and actions. However, Alternative 3 would place more emphasis on residential development, increasing the allowed densities for the residential land uses. This Alternative would result in a 15 percent increase in the number of new residential dwelling units when compared to the proposed project, resulting in most dwelling units then the other Alternatives. This Alternative would also result in more non-residential growth than Alternatives 1 and 2, but the same non-residential growth as the proposed project. This alternative was developed to potentially reduce the severity impacts related to greenhouse gas emissions and transportation, as most new development would be within close proximity to transit and in urban build up areas, or part of a mixed use area which would help to reduce per capita VMT. Figure 2.0-3 of Chapter 2 (Project Description) shows the proposed General Plan Land Use Map.

A summary of the growth projections, including population growth, housing units, jobs, and the resultant job/housing balance for the project and each alternative is shown in Table 5.0-1.

TABLE 5.0-1: GROWTH PROJECTIONS BY ALTERNATIVE

ALTERNATIVE	*DWELLING UNITS*	*POPULATION*	*NON-RESIDENTIAL SQUARE FEET OF DEVELOPMENT*	*JOBS*	*JOBS PER HOUSING UNIT*
EXISTING CONDITIONS					
City/Planning Area	22,215	76,057	28,007,888	47,538	2.14
NEW GROWTH					
Proposed General Plan	11,186	37,473	19,729,648	36,795	3.29
Alternative 1: Existing General Plan/No Project	9,469	31,722	6,452,761	10,181	1.08
Alternative 2: Modified Project Alternative	9,469	31,722	6,452,761	10,181	1.08
Alternative 3: Increased Density Alternative	12,866	43,101	19,729,648	36,795	2.86
TOTAL BUILDOUT GROWTH: EXISTING PLUS NEW GROWTH					
Proposed General Plan	33,401	113,530	47,737,536	84,333	2.52
Alternative 1: Existing General Plan/No Project	31,684	107,779	34,460,649	57,719	1.82
Alternative 2: Modified Project Alternative	31,684	107,779	34,460,649	57,719	1.82
Alternative 3: Increased Density Alternative	35,081	119,158	47,737,536	84,333	2.40

SOURCE: DE NOVO PLANNING GROUP, 2020

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 5.0-5 summarizes the comparative effects of each alternative.

The primary difference between the proposed General Plan and Alternative 2 is the Land Use Maps associated with each of these alternatives while the primary difference between the proposed General Plan and Alternative 3 is the assumption of a 15 percent increase in the number of dwelling units developed in each residential/mixed use land use. The goals, policies, and actions contained in the proposed General Plan would also apply and be implemented under Alternatives 2 and 3. Therefore, changes to the Land Use Map are the only variables that may increase or decrease the severity of one or more of the significant environmental impacts identified in this Draft EIR. It is important to note, however, that all of the Land Use Maps, across all of the Alternatives analyzed in this EIR, include the same urban footprint. In other words, none of the Alternatives introduce new urban land uses within areas of the City that are not already designated for such uses by the existing General Plan.

Throughout the preparation of the General Plan Update, the City Council, Planning Commission, and Working Group all expressed a desire and commitment to ensuring that the General Plan not only reflect the community's values and priorities, but also serve as a self-mitigating document and avoid significant environmental impacts to the greatest extent feasible. To further this goal of crafting a self-mitigating General Plan, the environmental analysis contained in this Draft EIR was completed concurrently with the development of the General Plan elements and Land Use Map in order to foster informed decision making regarding the Land Use Map and the General Plan goals, policies, and actions as they were being developed. As the Land Use Map was crafted, refined, and revised throughout the course of the General Plan Update, changes were made on a continuous basis in order to incrementally and substantially reduce potentially significant environmental impacts that were identified. The result of this approach and this process is a proposed General Plan Land Use Map that has reduced potentially significant impacts to the environment, while still meeting the project objectives identified by the City of Milpitas.

As demonstrated in the discussion below, the Alternative 2 General Plan Land Use Map is the environmentally superior alternative, as it was developed and refined to reduce as many environmental effects as possible, while still meeting most of the project objectives.

However, without the updated land use map Alternative 2 provides less high-quality housing options; and doesn't not meet the General Plan's Objectives to attract and retain businesses and industries that provide high-quality and high-paying jobs when compared to the proposed Projects Innovation Area, and Business Park Research and Development land uses to address emerging employment needs and trends. Additionally an Objective of the General Plan is to expand and improve neighborhood serving shopping areas to provide better local services near neighborhoods. The proposed Project does this through newly established commercial and mixed

use areas included within the Neighborhood Commercial, and Neighborhood Commercial Mixed Use land use designations that Alternative 2 would not implement. Thus, Alternative 2 fails to meet several Project Objectives as it retains of the existing land use map.

ALTERNATIVE 1 - NO PROJECT

Under Alternative 1, the City would continue to implement the existing General Plan and no changes would be made to address updated General Plan Guidelines, or the requirements of State law. Since adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions. Additionally, while the City currently has a certified Housing Element, it will be required to update its Housing Element and receive new State certification by December 2022, and the existing General Plan does not conform to state requirements regarding planning for future housing growth. The General Plan goals, policies, and actions, as well as the Land Use Map, would not be updated to address the vision and concerns of the City's residents, property owners, decision-makers, and other stakeholders that actively participated in the visioning and goal and policy development process.

Alternative 1 would result in the continuation of existing conditions and development levels. New growth would be allowed as envisioned under the existing General Plan, with land uses required to be consistent with the existing General Plan Land Use Map. Table 5.0-2 shows the acreages of each land use designation for the existing General Plan Land Use Map compared to the proposed Land Use Map.

TABLE 5.0-2: ALTERNATIVE 1 V. PROPOSED GENERAL PLAN LAND USE DESIGNATIONS COMPARISON

LAND USE DESIGNATION	*PROPOSED PROJECT - GENERAL PLAN UPDATE (ACRES)*	*ALTERNATIVE 1 – NO PROJECT (ACRES)*	*DIFFERENCE*
RESIDENTIAL LAND USES			
Hillside Very Low Density	4,297.81	4,297.81	0
Hillside Low Density	391.04	391.04	0
Hillside Medium Density	239.00	239.00	0
Low Density Residential	1,491.96	0	-1,491.96
Medium Density Residential	305.14	0	-305.14
High Density Residential	229.74	0	-229.74
Very High Density Residential	21.79	0	-21.79
Mobile Home Park	53.11	53.11	0
Single Family Low Density	0	1,491.96	+1,491.96
Single Family Medium Density	0	171.43	+171.43
Multi-Family High Density	0	328.40	+328.40
Multi-Family Medium Density	0	160.92	+160.92
High Density Transit Oriented	0	33.16	+33.16
Urban Residential	0	25.27	+25.27
Multi-Family Very High Density	0	149.24	+149.24
Residential Subtotal	*7,029.59*	*7,341.34*	*+311.75*
MIXED USE			

LAND USE DESIGNATION	*PROPOSED PROJECT - GENERAL PLAN UPDATE (ACRES)*	*ALTERNATIVE 1 – NO PROJECT (ACRES)*	*DIFFERENCE*
Neighborhood Commercial Mixed Use	140.34	0	-140.34
Town Center	133.58	133.58	0
Very High Density Mixed Use	3.00	0	-3.00
Boulevard Very High Density Mixed Use	0	54.09	+54.09
Residential Retail High Density Mixed Use	0	5.01	+5.01
Mixed Use	0	65.23	+65.23
Mixed Use Subtotal	*276.92*	*257.91*	*-19.01*
COMMERCIAL LAND USES			
General Commercial	155.35	357.52	+202.17
Neighborhood Commercial	27.28	0	-27.28
Highway Service	0	138.56	+138.56
Professional & Administrative Office	0	13.96	+13.96
Retail Subcenter	0	62.27	+62.27
Commercial Subtotal	*182.63*	*572.31*	*+389.68*
MANUFACTURING AND INDUSTRIAL BUSINESS PARK USES			
Industrial Park	224.82	685.55	+460.73
Manufacturing	505.74	721.57	+215.83
Business Park/Research & Development	630.88	0	-630.88
Manufacturing/Business Park Subtotal	*1,361.44*	1,407.12	+45.68
SPECIFIC PLAN USES			
Milpitas Gateway Specific Plan (Formerly the Midtown Specific Plan)	496.64	0	-496.64
Milpitas Metro Specific Plan (Formerly the Transit Area Specific Plan)	366.20	0	-366.2
Specific Plan Subtotal	*862.84*	*0*	*-862.84*
LIMITED DEVELOPMENT LAND USES			
Public Facilities	229.60	302.68	+73.08
Permanent Open Space	2,285.45	2,320.99	+35.54
Right-of-Way	60.83	75.11	+14.28
Waterway	37.82	49.68	+11.86
Limited Development Subtotal	*2,613.70*	*2,748.46*	*+134.76*
Totals	**12,327**	**12,327**	**0**

SOURCE: DE NOVO PLANNING GROUP, 2019

As shown in Table 5.0-2, Alternative 1 would provide for additional acres of residential only land uses and non-residential uses (i.e., commercial, manufacturing, industrial, and business park uses) within the Planning Area. However, Alternative 1 would provide for approximately fewer acres of

mixed land uses. Alternative 1 offers fewer acres of and opportunities to develop mixed use pedestrian and transit--oriented land uses within the city when compared to the proposed Land Use Map.

As shown in Table 5.0-1, Alternative 1 would result in increased housing and job growth within the Milpitas city limits when compared to existing conditions, but substantially less overall growth than the proposed project and Alternative 3. However, Alternative 1 would result in the same overall growth as Alternative 2.

Under Alternative 1 at full buildout, there would be an increase over existing conditions in residential growth (approximately 9,469 dwelling units) and jobs (approximately 10,181 jobs) within City limits. Under cumulative conditions, development in Planning Area combined under Alternative 1 would result in a population of 107,779 and 57,719 jobs. Under Alternative 1, the existing General Plan policy framework would still be in effect, which would constitute a status quo approach to land use regulation in the City. The Proposed Land Use Map, along with the policy framework proposed by the General Plan Update, encourages and aims to achieve a community with a balanced land use pattern that meets the City's long-term housing, employment, and civic needs. The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at in-fill locations within existing urbanized areas of the city, as well as new growth adjacent to existing urbanized areas. A mix and balance of uses to provide an improved ratio of local jobs to population, would ensure that development pays its fair-share of necessary roadway, public service, and other infrastructure improvements, and that provides for increased protection of natural resources would occur. The proposed General Plan was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection.

Alternative 1 would not include updated policies, particularly those related to housing, greenhouse gases, community health, equity/environmental justice and complete streets policies to address safety, access, and mobility for all roadway users, as required by State law. This alternative would not include various policies proposed in the General Plan update to ensure protection of environmental resources, both at a project level and under cumulative conditions, consistent with the objectives of CEQA.

Alternative 1 fails to meet several of the basic project objectives, including the following: 3. Attract and retain businesses and industries that provide high-quality and high-paying jobs; 4. Expand and improve neighborhood serving shopping areas to provide better local services near neighborhoods, and increased sales tax revenues; 5. Continue to maintain and improve multimodal transportation opportunities; 7. Address new requirements of State law; and 8. Address emerging transportation, housing, and employment trends.

Therefore, Alternative 1 (No Project) is rejected from further consideration as a CEQA alternative, as it fails to meet several of the project objectives. However, for reference, the environmental effects associated with Alternative 1 are discussed and summarized in Table 5.0-5 to provide a general comparison between the adopted Milpitas General Plan (Alternative 1 – No Project), the proposed project, and Alternatives 2 and 3.

ALTERNATIVE 2 – MODIFIED PROJECT ALTERNATIVE

Alternative 2 (Modified Project Alternative) would result in the same growth under the existing General Plan. Under Alternative 2, the City would adopt the updated General Plan policy document, including the revised goals, policies, and actions; however, the City would retain the existing land use map. Alternative 2 would result in less residential and nonresidential growth than the proposed General Plan and Alternative 3, but it would result in the same growth as Alternative 1. Land use designations are summarized in Table 5.0-3.

TABLE 5.0-3: ALTERNATIVE 2 V. PROPOSED GENERAL PLAN LAND USE DESIGNATIONS COMPARISON

LAND USE DESIGNATION	*PROPOSED PROJECT - GENERAL PLAN UPDATE (ACRES)*	*ALTERNATIVE 2 – MODIFIED PROJECT (ACRES)*	*DIFFERENCE*
RESIDENTIAL LAND USES			
Hillside Very Low Density	4,297.81	4,297.81	0
Hillside Low Density	391.04	391.04	0
Hillside Medium Density	239.00	239.00	0
Low Density Residential	1,491.96	0	-1,491.96
Medium Density Residential	305.14	0	-305.14
High Density Residential	229.74	0	-229.74
Very High Density Residential	21.79	0	-21.79
Mobile Home Park	53.11	53.11	0
Single Family Low Density	0	1,491.96	+1,491.96
Single Family Medium Density	0	171.43	+171.43
Multi-Family High Density	0	328.40	+328.40
Multi-Family Medium Density	0	160.92	+160.92
High Density Transit Oriented	0	33.16	+33.16
Urban Residential	0	25.27	+25.27
Multi-Family Very High Density	0	149.24	+149.24
Residential Subtotal	*7,029.59*	*7,341.34*	*+311.75*
MIXED USE			
Neighborhood Commercial Mixed Use	140.34	0	-140.34
Town Center	133.58	133.58	0
Very High Density Mixed Use	3.00	0	-3.00
Boulevard Very High Density Mixed Use	0	54.09	+54.09
Residential Retail High Density Mixed Use	0	5.01	+5.01
Mixed Use	0	65.23	+65.23
Mixed Use Subtotal	*276.92*	*257.91*	*-19.01*
COMMERCIAL LAND USES			
General Commercial	155.35	357.52	+202.17
Neighborhood Commercial	27.28	0	-27.28
Highway Service	0	138.56	+138.56
Professional & Administrative Office	0	13.96	+13.96
Retail Subcenter	0	62.27	+62.27
Commercial Subtotal	*182.63*	*572.31*	*+389.68*
MANUFACTURING AND INDUSTRIAL BUSINESS PARK USES			
Industrial Park	224.82	685.55	+460.73
Manufacturing	505.74	721.57	+215.83
Business Park/Research & Development	630.88	0	-630.88
Manufacturing/Business Park Subtotal	*1,361.44*	1,407.12	+45.68

LAND USE DESIGNATION	*PROPOSED PROJECT - GENERAL PLAN UPDATE (ACRES)*	*ALTERNATIVE 2 – MODIFIED PROJECT (ACRES)*	*DIFFERENCE*
SPECIFIC PLAN USES			
Milpitas Gateway Specific Plan (Formerly the Midtown Specific Plan)	496.64	0	-496.64
Milpitas Metro Specific Plan (Formerly the Transit Area Specific Plan)	366.20	0	-366.2
Specific Plan Subtotal	*862.84*	*0*	*-862.84*
LIMITED DEVELOPMENT LAND USES			
Public Facilities	229.60	302.68	+73.08
Permanent Open Space	2,285.45	2,320.99	+35.54
Right-of-Way	60.83	75.11	+14.28
Waterway	37.82	49.68	+11.86
Limited Development Subtotal	*2,613.70*	*2,748.46*	*+134.76*
Totals	**12,327**	**12,327**	**0**

SOURCE: DE NOVO PLANNING GROUP, 2019

The goals, policies, and actions of the General Plan Update would apply to subsequent development, planning, and infrastructure projects under this alternative.

As shown previously in Table 5.0-1, Alternative 2 would result in approximately 1,717 fewer housing units and 5,751 fewer residents within Milpitas when compared to the proposed General Plan Land Use Map. Nonresidential square feet would be reduced by 13,276,887 square feet and employment opportunities would be decreased under this alternative, with approximately 26,614 fewer jobs created within the city limits when compared to the proposed General Plan.

As shown in Table 5.0-3 Alternative 2 would provide for approximately additional acres of residential only land uses and additional acres of non-residential uses (i.e., commercial, manufacturing, industrial, and business park uses) within the Planning Area. However, Alternative 2 would provide for approximately fewer acres of mixed land use. Alternative 2 offers fewer acres of and opportunities to develop mixed use pedestrian and transit-oriented land uses within the city when compared to the proposed Land Use Map.

Aesthetics

As described in Chapter 3.1 (Aesthetics and Visual Resources) impacts related to Aesthetics were found be less than significant. Milpitas is largely urbanized and developed with the exception of the land to the east within the SOI boundary. All Project Alternatives would result in similar development patterns; however, as noted above, this alternative and the No Project Alternative would result in the least amount of dwelling units and non-residential square feet. The reduced development potential under this alternative as compared to the Proposed General plan and Alternative 3 would likely result in decreased building intensities and decreased densities in the Planning Area. Milpitas has prepared the proposed General Plan to include numerous policies and actions related to community design to maintain and enhance the Planning Area's appearance

and function. Specifically, the policies and actions are intended to protect and preserve visual resources, including the hillsides, and ensure appropriate transitions between land uses to preserve the community's harmonious character within the Planning Area.

Maximum densities and building intensities under Alternative 2 would be the same as the No Project Alternative, and aesthetic impacts would generally be the same under both of these alternatives. Visual impacts would be slightly reduced when compared to the Proposed General Plan and Alternative 3. However, Alternative 2 includes adoption of the updated policy document, which includes numerous policies and actions to preserve and protect visual resources. Therefore, Alternative 2 would be superior to the proposed General Plan, the No Project Alternative (Alternative 1), and Alternative 3.

Agriculture and Forest Resources

As described in Impact 3.2-1 of Chapter 3.2, impacts related to Agricultural and Forest Resources were found be less than significant. There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Milpitas Planning Area. Furthermore, there are no lands within the Milpitas Planning Area that are currently under a Williamson Act contract. Additionally, there are no forest lands or timber lands located within the Milpitas Planning Area.

This impact would remain less than significant under all of the Alternatives. All Project Alternatives would result in general plan land use designations that would result in similar development patterns. Therefore, the impact level under all scenarios would remain the same.

Air Quality

As described in Chapter 3.3 (Air Quality), the proposed General Plan implementation would result in less than significant impacts to air quality.

As stated in Chapter 3.3, existing VMT in Milpitas is approximately 1,985,460. Milpitas has an existing population of approximately 76,057 and existing job base of approximately 47,538 jobs. Full buildout of the proposed General Plan could generate up to 37,473 new residents and generate up to 36,795 new jobs in Milpitas, resulting in a VMT of 2,972,767. Implementation of the proposed General Plan would result in an approximately 49.7% increase in citywide VMT, compared to a 60.1% increase in combined population and jobs. Therefore, the growth rate associated with the proposed General Plan is lower than the VMT increase associated with it. Moreover, the proposed General Plan includes a range of goals and policies that cover the full breadth of air quality issues as recommended in the BAAQMD's 2017 Clean Air Plan.

Under Alternative 2, the Planning Area would be developed with the existing General Plan Land Use Map, but would be required to adhere to the same policy guidance and local, state, and regional air quality measures as the Proposed General Plan. Maximum densities under Alternative 2 would be the same as the No Project Alternative, and buildout of Alternative 2 would result in approximately 1,717 fewer housing units, 5,751 fewer residents, and 26,614 fewer jobs within Milpitas when compared to the proposed General Plan Land Use Map. The decrease in total

residential unit count, population, and jobs may decrease the total air quality emissions; however, the addition of proposed General Plan's project-generated VMT would result in an approximately 3.0% decrease in total VMT per service population by 2040 compared with the General Plan VMT 2040 projections under the existing General Plan. As such, the air quality impact is increased slightly under Alternative 2 when compared to the proposed General Plan. Moreover, when compared to Alternative 1 (No Project), the Proposed General Plan, Alternative 2 and Alternative 3 all include a range of goals and policies that would reduce air quality and toxic air contaminant emissions, consistent with BAAQMD's 2017 Clean Air Plan. Therefore, impacts to air quality under Alternative 2 would be slightly reduced when compared to the No Project Alternative, which does not include an updated policy document.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. As described in Chapter 3.4 (Biological Resources) General Plan implementation would result in less than significant impacts to biological resources. Approval of the General Plan would not directly approve or entitle any development or infrastructure projects. However, implementation of the General Plan and existing Land Use Map would allow and facilitate future development in Milpitas, which could result in adverse impacts to special-status plant and wildlife species, as well as sensitive natural habitat or wildlife movement corridors. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of special status plants and animals, including habitat. The City of Milpitas has prepared the proposed General Plan to include numerous policies and actions intended to protect special status plants and animals, including habitat, from adverse effects associated with future development and improvement projects.

All Project Alternatives would result in similar development patterns. The proposed General Plan and Alternatives 2 and 3 would also include updated biological policies and actions aimed at protecting biological resources (as described in detail in Chapter 3.4). Therefore, impacts to biological resources under Alternative 2 would remain the same when compared to the proposed General Plan and Alternative 3. However, because Alternative 2 would update the biological resource policies consistent with the Proposed General Plan, impacts to biological resources would be slightly reduced when compared to the No Project Alternative, which does not include an updated policy document.

Cultural and Tribal Cultural Resources

As described in Chapter 3.5 (Cultural and Tribal Cultural Resources) General Plan implementation would result in less than significant impacts to cultural and tribal cultural resources.

All Project Alternatives would result in similar development patterns and a similar development footprint. However, because Alternative 2 would update cultural resource policies to include new policies and actions related to agency coordination, consultation, and monitoring consistent with the proposed General Plan Policy Document (and Alternative 3), impacts to cultural resources would be slightly reduced when compared to the No Project Alternative which does not include

additional and updated policies related to cultural resources. The impact under all other scenarios (the Proposed General Plan, and Alternatives 2 and 3) would remain the same.

Greenhouse Gas Emissions and Energy

As described in Chapter 3.7 (Greenhouse Gas Emissions and Energy), the proposed General Plan would result in less than significant impacts to Greenhouse Gases, Climate Change, and Energy.

As stated in Chapter 3.7, the proposed General Plan is consistent with the CEQA Guidelines Section 15183.5 framework for developing a plan to reduce GHG emissions. As shown in Table 2.0-2 in Chapter 2.0 of this Draft EIR, buildout of the City's existing General Plan would result in a projected population of 107,779. With implementation of the proposed project, the City of Milpitas Planning Area is estimated to grow to a total population of 113,530. This is an approximately 5% increase compared to the previous population forecast. However, the land use modifications and policies proposed as part of the proposed General Plan would result in an approximately 14% reduction in per capita vehicle miles traveled compared to 2040 buildout of the existing General Plan, as shown in Table 3.14-2 in Chapter 3-14 of this Draft EIR. In addition, the proposed project is consistent with the existing 2013 CAP, and will also be consistent with the forthcoming update to the 2013 Milpitas CAP, ensuring consistency with a Qualified GHG Reduction Strategy. The City of Milpitas would not exceed the GHG emission targets established to ensure compliance with SB 32, AB 32, CARB's 2017 Scoping Plan and other California legislation for future year 2030 and General Plan buildout year 2040. Moreover, the proposed project includes a range of goals and policies that would reduce GHG emissions associated with future development and improvement projects.

Under Alternative 2, the Planning Area would be developed with the existing General Plan Land Use Map, but would be required to adhere to the same policy guidance and local, state, and regional greenhouse gas measures as the Proposed General Plan. Maximum densities under Alternative 2 would be the same as the No Project Alternative, and buildout of Alternative 2 would result in approximately 1,717 fewer housing units, 5,751 fewer residents, and 26,614 fewer jobs within Milpitas when compared to the proposed General Plan Land Use Map. The decrease in total residential unit count and population may decrease the total greenhouse gas emissions and energy use, however, density reductions would generally be seen to increase per capita GHG emissions levels. As such, the greenhouse gas emissions impact is increased slightly under Alternative 2 when compared to the proposed General Plan. Moreover, when compared to Alternative 1 (No Project), the Proposed General Plan, Alternative 2 and Alternative 3 all include a range of goals and policies that would reduce GHG emissions, including policies to encourage mixed-use development, complete streets and multi modal improvements that would further reduce per capita GHG impacts. Therefore, when compared to Alternative 1 (No Project), Alternative 2 would be slightly superior. However, the proposed General Plan and Alternative 3 would be superior to Alternative 2 because both include an updated land use map that presents substantially more opportunities for trip internalization and increased opportunities for walking and bicycling due to their proposed mix of higher density residential, office, retail, and other uses under increased mixed-use designations.

Geology

As described in Chapter 3.6 (Geology), the proposed General Plan would result in less than significant impacts to Geology and Soils. All alternatives would result in similar development patterns. The proposed General Plan and Alternatives 2 and 3 would also include updated policies related to geologic hazards, including requirements for project reviews and standards for construction and building practices (as described in detail in Chapter 3.6).

All future projects within the Planning Area will be required to comply with state laws including the preparation of stormwater plans, and compliance with the provisions of the California Building Standards Code (CBSC), which requires development projects to perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues, and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. Therefore, impacts related to Geology and Soils would generally remain the same under all alternatives. However, the updated policy document provides for additional policies and action related to geologic hazards and safety when compared to the existing General Plan, therefore the proposed General Plan and Alternatives 2 and 3 would be considered to be slightly superior to the Alternative 1.

Hazards and Hazardous Materials

As described in Chapter 3.8 (Hazards and Hazardous Materials), all impacts related to hazards and hazardous materials were found to be less than significant. The proposed General Plan and Alternative 2 would include updated policies and actions aimed at protecting the public from hazardous materials and wildfire hazards. These policies and actions in the General Plan would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The proposed General Plan also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance. (as described in detail in Chapter 3.8). Additionally, under all Project Alternatives limited development could take place in areas of high wildland fire risk. However, so long as there is adequate coordination with emergency service providers in the consideration of development proposals, potential risks associated with wildland fires could be reduced to a level considered less than significant.

All Project Alternatives would result in additional urban uses including commercial, industrial, residential, and mixed-use and public facility development. Additionally, all Project Alternatives would result in development patterns that include future development of urban uses in areas designated as moderate to high fire hazard severity zones. The impacts under all scenarios would remain similar, however reduced development allowed under Alternative 2 and Alternative 1 (No Project) would reduce the total number of people potentially exposed to hazards and hazardous materials, including wildfires. Therefore, impacts to hazards and hazardous materials would be slightly reduced when compared to the proposed General Plan and Alternative 3. Because

Alternative 2 includes the adoption of the updated General Plan policy document, Alternative 2 would be superior to Alternative 1 (No Project).

Hydrology and Water Quality

As described in Chapter 3.9 (Hydrology and Water Quality), under all impact areas, implementation of the proposed General Plan would result in less than significant impacts related to Hydrology and Water Quality.

All of the alternatives generally would allow development to occur in a manner similar to the proposed General Plan within a highly urbanized environment, where flood control and water quality protection measures are well established and enforced. This variation in intensity and land use designation changes would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impact on groundwater supplies. Impact for each alternative, like the proposed project, would be less than significant.

Alternative 2 and Alternative 1 (No Project) would result in development of the existing General Plan Land Use Map, which results in the least number of housing units and non-residential square feet when compared to the proposed General Plan and Alternative 3. Compared to the proposed General Plan, the potential water quality impacts related to construction and operation would be similar. As described in Chapter 3.9, General Plan implementation would not result in construction, or long-term impacts to surface water quality from urban stormwater runoff. All alternatives would also be required to submit a SWPPP with BMPs to the RWQCB and comply with all storm water sewer system (MS4) requirements. It would be expected that impacts related to water quality would be similar under Alternatives 2 and Alternative 3 as compared to the Proposed General Plan. The implementation of the General Plan policies and actions which includes policies aimed to enhance stormwater quality and infiltration as well as actions to review development projects to identify potential stormwater and drainage impacts and require development to include measures to ensure off-site runoff is not increased as a beyond pre-development levels would not be updated and included under Alternative 1 as this alternative does not include an update to the General Plan Policy Document to include updated policies related to permeable surfaces onsite detention, and infiltration. Therefore, this impact under the No-Project Alternative may be slightly increased when compared to all other alternatives.

Land Use Planning and Population/Housing

The proposed General Plan and Alternative 2 are long-range land use plans. As described in Chapter 3.10 (Land Use, Population, and Housing) all impacts related to land use, population, and housing were found to be less than significant under the Proposed General Plan. As described previously, the proposed General Plan and Alternatives 2 would include adoption of the updated policy document consistent with the Proposed General Plan. Therefore, Alternative 2 would also result in the same impact level as the proposed General Plan. However, Alternative 2 would retain the existing General Plan Land Use Map and would be less effective in promoting and encouraging more compact urban development and revitalization through mixed use development.

Alternative 2 and the No Project Alternative (Alternative 1) result in the smallest growth of residential and non-residential development. The amount and typology of allowable development under the Proposed General Plan, has been crafted to assist Milpitas to meet the City's Regional Housing Needs Allocation (RHNA) for future housing needs, and comply with State law. Because Alternative 2 the No Project Alternative retain the existing General Plan Land Use Map, it would result in less consistency with pertinent state and regional plans relative to the proposed General Plan and Alternative 3 in terms of the Plan's ability to meet housing needs. However, Alternative 2 would provide greater consistency with applicable state and regional plans than the No Project Alternative, due to Alternative 2 adopting the updated General Plan policy document.

Mineral Resources

As described in Chapter 3.11, the proposed General Plan would result in less than significant impacts relating mineral resources. All of the alternatives, like the Proposed General Plan, accommodate development generally in the same areas, and these areas are, for the most part, are either already urbanized or are planned for the same development. Given that mineral resources would not be impacted by the proposed project, impacts associated with each of the alternatives would be the same and all would remain less than significant.

Noise

As described in Chapter 3.12, and 4.0 the proposed General Plan would result in significant noise impacts related to increases in transportation noise. Buildout of the General Plan would contribute to transportation noise and in increases in traffic noise levels at existing sensitive receptors. The proposed General Plan and Alternative 2 include General Plan Policies intended to minimize exposure to excessive noise, including noise associated with increased traffic. Additional policies would ensure that new development mitigates potential noise impacts to the greatest extent feasible through incorporating the noise control treatments necessary to achieve acceptable noise levels and sets criteria for evaluating future increases in traffic noise levels.

Alternative 2 would result in fewer residential units, less non-residential square feet and fewer jobs within the city. These reductions in jobs and housing units would slightly reduce traffic and traffic related noise. As such, noise impacts would be slightly reduced under Alternative 2 when compared to the proposed General Plan.

Public Services and Recreation

As described in Chapter 3.13, the proposed General Plan would result in less than significant impacts relating to public services and recreation. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The proposed General Plan includes policies and actions that require payment of impact fees to the City and other public agencies to ensure that additional development allowed does not have adverse impacts on these services and agencies.

Alternative 2 would adopt the updated General Plan policy document, but retain the existing General Plan Land Use Map. Under Alternative 2 and the No Project Alternative, the development

area and development types would remain similar, however, there would be the fewest jobs, dwelling units, non-residential square feet, and reduced population when compared to the Propose General Plan and Alternative 3 and thus, impacts to public services (the demand for police, fire and other public services) would be slightly reduced. Overall, Alternative 2 would have a slightly reduced impact to public services when compared to the proposed project and Alternative 3, and a reduced impact when compared to Alternative 1 as Alternative 1 would not include adoption of the updated General Plan policy document.

Transportation

As described in Chapter 3.14 (Transportation and Circulation), the proposed General Plan would result in significant and unavoidable impacts to the circulation network.

As described in Section 3.14 (Transportation and Circulation), the average residential VMT per capita is expected to decrease by 14.3% from 12.87 under the existing General plan to 11.03 under the proposed General Plan and average employment VMT per employee is expected to slightly increase by approximately 0.19% from 20.37 under the existing General Plan to 20.41 under the proposed General Plan Update. The average VMT per capita resulting from buildout of the General Plan was assessed using a significance threshold based on the countywide average for Santa Clara County. The projected VMT per employee for the City of Milpitas is nearly 31 percent higher than the applied significance threshold while the projected VMT per resident is about four percent lower than the applied significance threshold. As a result, the VMT impacts associated with employment-based uses allowed by the proposed General Plan were considered significant and unavoidable.

Alternative 2 and Alternative 1 (No Project) would result in development of the existing General Plan Land Use Map; therefore, as stated above, the average residential VMT per capita would be 12.87 and average employment VMT per employee would 20.37. Under Alternative 2 and Alternative 1, the VMT impacts associated with employment-based uses would still be considered significant and unavoidable. However, under Alternative 2, the updated policy document would be adopted and future developments would be required to adhere to the same policy guidance and local, state, and regional air quality measures as the Proposed General Plan and Alternative 3. Therefore, when compared to Alternative 1, Alternative 2 would slightly reduce impacts to transportation and circulation. While the proposed General Plan and Alternative 3 would result in a slightly higher average employment VMT per employee than Alternative 2 and Alternative 1, the land use patterns and intensities would result in a 14.3% reduction in residential VMT. Additionally, the updated land use maps under the proposed General Plan and Alternative 3 includes a more balanced mix of uses as part of mixed-use developments and additional opportunities for increased densities as part of mixed-use developments which includes opportunities for trip internalization, and increased opportunities for walking and bicycling. Therefore, the transportation impacts are slight increased under Alternative 2 when compared to the proposed General Plan and Alternative 3.

Utilities and Service Systems

As described in Chapter 3.15, the proposed General Plan would result in less than significant impacts relating Utilities.

New development would place increased demands on utilities. Under Alternative 2, the Planning Area would be developed with the same development patterns and uses as the existing General Plan (Alternative 1). Therefore, Alternative 2 would result in the least amount of new residential and non-residential development and the smallest increase in population and jobs compared to the proposed General Plan (and Alternative 3). The quantity of infrastructure installed would not be substantially reduced, as all alternatives would require similar development patterns and footprints, but the demand for utility services, including wastewater and solid waste services would be less than would be required under the Proposed General Plan and Alternative 3.

Separately, the total storm drainage runoff under Alternative 2 would be approximately the same when compared to the proposed project, due to the general development footprint remaining the same for this alternative when compared to the proposed General Plan.

Therefore, demand for utilities would be slightly less under this alternative when compared to the proposed General Plan and Alternative 3 and the same impact when compared to Alternative 1 as Alternative 1 has the same growth and subsequent demand for utility services.

Wildfire

As described in Chapter 3.16 (Wildfire), the proposed General Plan would result in less than significant impacts relating to all other Wildfire impacts. All alternatives would result in similar development patterns and a similar development footprint. However because Alternative 2 would update policies to include new policies and actions related to agency coordination, consultation, and monitoring consistent with the proposed General Plan (and Alternative 3), impacts related to wildfire impacts would be slightly reduced when compared to the No Project Alternative, which does not include additional and updated policies and actions aimed reducing the risk of wildfire hazards. The impact under all other scenarios (the Proposed General Plan, and Alternatives 2 and 3) would remain the same.

Irreversible Effects

The proposed project would have a significant and unavoidable impact associated with irreversible environmental effects as described under Impact 4.17. Implementation of the proposed General Plan would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the General Plan would result in irretrievable commitments by introducing development onto sites that are presently undeveloped. Additionally, development will physically change the environment in terms of aesthetics, air emission, noise, traffic, open space, and natural resources. These physical changes are irreversible after development occurs. Therefore, the proposed General Plan would result in changes in land use within the Planning Area that would commit future generations to these uses.

During the planning horizon, development under Alternative 2 would be reduced in comparison to the proposed General Plan. Under cumulative conditions, Alternative 2 would result in less residential and less non-residential floor area (see Table 5.0-1). Alternative 2 would use nonrenewable resources, including metals, stone, and other materials related to construction, and result in on-going demand for fossil fuels and other resources associated with energy production at levels greater than the proposed project. The associated irretrievable commitment of nonrenewable resources and permanent conversion of other undeveloped lands under Alternative 2 would remain a significant impact. Alternative 2 would have slightly reduced impact in comparison to the proposed General Plan due to reduced development levels.

ALTERNATIVE 3 – INCREASED RESIDENTIAL DENSITY ALTERNATIVE

Alternative 3 (Increased Residential Density Alternative) provides for a balance of job-creating and residential development land uses within the City. Alternative 3 and the proposed project would allow substantially more non-residential and residential development when compared to the existing General Plan, but Alternative 3 would increase the residential densities providing even more residential development than the proposed project.

As described previously, Alternative 3 would implement the proposed General Plan Land Use Map as shown in Figure 2.0-3 of Chapter 2 (Project Description); however, under Alternative 3, it is assumed that the density of residential development would increase by 15 percent, resulting in 1,680 more dwelling units than the proposed project. The goals, policies, and actions of the General Plan Update would apply to subsequent development, planning and infrastructure projects under this alternative.

As shown in Table 5.0-4, Alternative 3 would maintain the same acreage of land uses as the proposed project, but result in 1,680 more dwelling units when compared to the proposed Land Use Map.

TABLE 5.0-4: POTENTIAL NEW HOUSING UNIT GROWTH IN PLANNING AREA OVER EXISTING CONDITIONS (PROPOSED PROJECT VS ALTERNATIVE 3)

LAND USE DESIGNATION	*GENERAL PLAN LAND USE MAP - TOTAL ACRES*	*PROPOSED PROJECT – HOUSING UNITS AT BUILDOUT*	*ALTERNATIVE 3 – HOUSING UNITS AT BUILDOUT*	*DIFFERENCE IN HOUSING UNITS*
RESIDENTIAL LAND USES				
Hillside Very Low Density	4,297.81	193	222	+29
Hillside Low Density	391.04	127	146	+19
Hillside Medium Density	239.00	78	89	+11
Low Density Residential	1,491.96	186	214	+28
Medium Density Residential	305.14	63	72	+9
High Density Residential	229.74	364	419	+55
Very High Density Residential	21.79	64	74	+10
Mobile Home Park	53.11	--	--	--
Residential Dwelling Units Subtotal	--	*1,075*	*1,236*	*+161*
MIXED USE				

LAND USE DESIGNATION	*GENERAL PLAN LAND USE MAP - TOTAL ACRES*	*PROPOSED PROJECT – HOUSING UNITS AT BUILDOUT*	*ALTERNATIVE 3 – HOUSING UNITS AT BUILDOUT*	*DIFFERENCE IN HOUSING UNITS*
Neighborhood Commercial Mixed Use	140.34	1,578	1,815	+237
Town Center	133.58	535	615	+80
Very High Density Mixed Use	3.00	269	309	+40
Mixed Use Dwelling Units Subtotal	--	*2,382*	*2,739*	*+357*
COMMERCIAL LAND USES				
General Commercial	155.35	--	--	--
Neighborhood Commercial	27.28	--	--	--
Commercial Dwelling Units Subtotal	--	--	--	--
MANUFACTURING AND INDUSTRIAL BUSINESS PARK USES				
Industrial Park	224.82	--	--	--
Manufacturing	505.74	--	--	--
Business Park/Research & Development	630.88	--	--	--
Manufacturing/Business Park Dwelling Units Subtotal	--	--	--	--
SPECIFIC PLAN USES				
Milpitas Gateway Specific Plan (Formerly the Midtown Specific Plan)	496.64	1,435	1,650	+215
Milpitas Metro Specific Plan (Formerly the Transit Area Specific Plan)	366.20	6,296	7,241	+945
Specific Plan Dwelling Units Subtotal	--	*7,731*	*8,891*	*+1,160*
LIMITED DEVELOPMENT LAND USES				
Public Facilities	229.60	--	--	--
Permanent Open Space	2,285.45	--	--	--
Right-of-Way	60.83	--	--	--
Waterway	37.82	--	--	--
Limited Development Dwelling Units Subtotal	--	--	--	--
Total Housing Units		**11,186**	**12,866**	**+1,680**

As shown in Table 5.0-1, Alternative 3 would result in approximately 12,866 new housing units or 1,680 more housing units within the city when compared to the proposed General Plan Land Use Map. Employment opportunities would be the same as the proposed General Plan, resulting in approximately 26,614 more jobs created within the city limits when compared to the existing General Plan.

Under full buildout conditions, this alternative would result in a total population within the Planning Area of approximately 119,158, which is slightly higher than the total population projection of 113,530 under the proposed General Plan.

Aesthetics

As described in Chapter 3.1 (Aesthetics and Visual Resources) impacts related to Aesthetics were found be less than significant. Milpitas is largely urbanized and developed with the exception of the land outside of the City limits to the east within the SOI boundary. All Project Alternatives would result in similar development patterns. The proposed General Plan and Alternative 3 would allow for a greater increase in intensity and density of existing lands than is currently allowed by Alternatives 1 and 2. As noted above, this alternative would result in a slightly more overall residential development in the Planning area when compared to the Proposed General Plan. Therefore, the slightly increased development potential under this alternative as compared to the Proposed General plan would result in increased residential building heights and densities in the Planning Area and visual impacts associated with increase building height and bulk would be increased compared to the Proposed General Plan and other Alternatives (Alternative 1 and 2).

Agriculture and Forest Resources

As described in Impact 3.2-1 of Chapter 3.2, impacts related to Agricultural and Forest Resources were found be less than significant. There are no agricultural lands identified by the CA Department Conservation's Farmland Mapping and Monitoring Program within the Milpitas Planning Area. Furthermore, there are no lands within the Milpitas Planning Area that are currently under a Williamson Act contract. Additionally, there are no forest lands or timber lands located within the Milpitas Planning Area.

This impact would remain less than significant under all of the Alternatives. All Project Alternatives would result in general plan land use designations that would result in similar development patterns. Therefore, the impact level under all scenarios would remain the same.

Air Quality

As described in Chapter 3.3 (Air Quality), the proposed General Plan implementation would result in less than significant impacts to air quality.

As stated in Chapter 3.3, existing VMT in Milpitas is approximately 1,985,460. Milpitas has an existing population of approximately 76,057 and existing job base of approximately 47,538 jobs. Full buildout of the proposed General Plan could generate up to 37,473 new residents and generate up to 36,795 new jobs in Milpitas, resulting in a VMT of 2,972,767. Implementation of the proposed General Plan would result in an approximately 49.7% increase in citywide VMT, compared to a 60.1% increase in combined population and jobs. Therefore, the growth rate associated with the proposed General Plan is lower than the VMT increase associated with it. Moreover, the proposed General Plan includes a range of goals and policies that cover the full breadth of air quality issues as recommended in the BAAQMD's 2017 Clean Air Plan.

Under Alternative 3, the Planning Area would be developed with slightly more housing units when compared to the Proposed General Plan, but the same amount of non-residential square feet. The increase in total residential unit count and population may increase the total air quality emissions; however, the increased residential density and mixed-use developments under the

Alternative 3 is anticipated to result in a further decrease in total VMT per service population by 2040 compared with the General Plan VMT 2040 projections under the existing General Plan. As such, the air quality impact is roughly equal under Alternative 3 when compared to the proposed General Plan and decreased the most under Alternative 3 when compared to Alternative 1 (no project) and Alternative 2, which rely on the existing General Plan Land Use Map. The Proposed General Plan, Alternative 2 and Alternative 3 all include a range of goals and policies that would reduce air quality and toxic air contaminant emissions, consistent with BAAQMD's 2017 Clean Air Plan. Therefore, impacts to air quality under Alternative 3 would be roughly equal when compared to the proposed General Plan and better than all other Alternatives.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. As described in Chapter 3.4 (Biological Resources), General Plan implementation would result in less than significant impacts to biological resources. Approval of the General Plan would not directly approve or entitle any development or infrastructure projects. However, implementation of the General Plan and Land Use Map would allow and facilitate future development in Milpitas, which could result in adverse impacts to special-status plant and wildlife species, as well as sensitive natural habitat or wildlife movement corridors. Subsequent development projects will be required to comply with the General Plan and adopted Federal, State, and local regulations for the protection of special status plants and animals, including habitat. The City of Milpitas has prepared the General Plan to include numerous policies and actions intended to protect special status plants and animals, including habitat, from adverse effects associated with future development and improvement projects.

All Project Alternatives would result in similar citywide development patterns. The proposed General Plan and Alternatives 2 and 3 would also include updated biological policies and actions aimed at protecting biological resources (as described in detail in Chapter 3.4). Therefore, impacts to biological resources under Alternative 3 would remain the same when compared to the proposed General Plan and Alternative 2. However, because Alternative 3 would update conservation and biological resource policies, consistent with the Proposed General Plan, impacts to biological resources would be slightly reduced when compared to the No Project Alternative, which does not include an updated policy document.

Cultural and Tribal Cultural Resources

As described in Chapter 3.5 (Cultural and Tribal Cultural Resources), General Plan implementation would result in less than significant impacts to cultural and tribal cultural resources. All Project alternatives would result in similar development patterns and a similar development footprint. However, because Alternative 3 would update cultural resource policies to include new policies and actions related to agency coordination, consultation, and monitoring consistent with the Proposed General Plan's Policy Document, impacts to cultural resources would be slightly reduced when compared to the No Project Alternative, which does not include additional and updated policies related to cultural resources. The impact under all other scenarios (the Proposed General Plan, and Alternatives 2 and 3) would remain the same.

Greenhouse Gas Emissions and Energy

As described in Chapter 3.7 (Greenhouse Gas Emissions and Energy), the proposed General Plan would result in less than significant impacts to Greenhouse Gases, Climate Change, and Energy.

As stated in Chapter 3.7, the proposed General Plan is consistent with the CEQA Guidelines Section 15183.5 framework for developing a plan to reduce GHG emissions. As shown in Table 2.0-2 in Chapter 2.0 of this Draft EIR, buildout of the City's existing General Plan would result in a projected population of 107,779. With implementation of the proposed project, the City of Milpitas Planning Area is estimated to grow to a total population of 113,530. This is an approximately 5% increase compared to the previous population forecast. However, the land use modifications and policies proposed as part of the proposed General Plan would result in an approximately 14% reduction in per capita vehicle miles traveled compared to 2040 buildout of the existing General Plan, as shown in Table 3.14-2 in Chapter 3-14 of this Draft EIR. In addition, the proposed project is consistent with the existing 2013 CAP, and will also be consistent with the forthcoming update to the 2013 Milpitas CAP, ensuring consistency with a Qualified GHG Reduction Strategy. The City of Milpitas would not exceed the GHG emission targets established to ensure compliance with SB 32, AB 32, CARB's 2017 Scoping Plan and other California legislation for future year 2030 and General Plan buildout year 2040. Moreover, the proposed project includes a range of goals and policies that would reduce GHG emissions associated with future development and improvement projects.

Under Alternative 3, the Planning Area would be developed with slightly more housing units when compared to the Proposed General Plan, but the same amount of non-residential square feet. The increase in total residential unit count and population may increase the total greenhouse gas emissions and energy use, however, density intensification and the increases in mixed use developments under Alternative 3 would generally be seen to reduce per capita GHG. As such, the greenhouse gas emissions impact is reduced slightly when compared to the proposed General Plan. Moreover, when compared to Alternative 1 (no project), the proposed General Plan, Alternative 3, and Alternative 2 include a range of goals and policies that would reduce GHG emissions, including policies to encourage mixed-use development, complete streets and multi modal improvements that would further reduce per capita GHG and VMT impacts. Additionally, because Alternative 1 (no project) and Alternative 2 rely on the existing General Plan Land Use Map, the proposed General Plan and 3 present substantially more opportunities for trip internalization and increased opportunities for walking and bicycling due to their proposed mix of higher density residential, office, retail, and other uses under increased mixed-use designations. Therefore, impacts related to greenhouse gases, climate change and energy resources would also be reduced the most under alternative 3 when compared to the proposed General Plan and all other Alternatives.

Geology

As described in Chapter 3.6 (Geology), the proposed General Plan would result in less than significant impacts to geology and soils. All Project alternative would result in similar development patterns. The Proposed General Plan, and Alternatives 3 and 2 would also include updated policies

related to geologic hazards, including requirements for project review and standards for construction and building practices (as described in detail in Chapter 3.6).

All future projects within the Planning Area will be required to comply with state laws including the preparation of stormwater plans, and compliance with the provisions of the California Building Standards Code (CBSC), which requires development projects to perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues, and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. Therefore, impacts related to geology and soils would generally remain the same under all alternatives. However, the updated policy document provides for additional policies and actions related to geologic hazards and safety when compared to the existing General Plan, therefore the proposed General Plan and Alternatives 2 and 3 would be considered to be slightly superior to the Alternative 1.

Hazards and Hazardous Materials

As described in Chapter 3.8 (Hazards and Hazardous Materials), all impacts related to hazards and hazardous materials were found to be less than significant. The proposed General Plan and Alternative 3 would include updated policies and actions aimed at protecting the public from hazardous materials and wildfire hazards. These policies and actions in the General Plan would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The proposed General Plan also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance. (as described in detail in Chapter 3.8). Additionally, under all Project Alternatives limited development could take place in areas of high wildland fire risk. However, so long as there is adequate coordination with emergency service providers in the consideration of development proposals, potential risks associated with wildland fires could be reduced to a level considered less than significant.

All Project Alternatives would result in additional urban uses including commercial, industrial, residential, and mixed-use and public facility development. Additionally, all Project Alternatives would result in development patterns that include future development of urban uses in areas designated as moderate to high fire hazard severity zones. The impacts under all scenarios would remain similar, however the increased residential development allowed under Alternative 3 would increase the total number of people potentially exposed to hazards and hazardous materials, including wildfires. Therefore, impacts to hazards and hazardous materials would be the greatest when compared to the proposed General Plan and Alternatives 1 and 2.

Hydrology and Water Quality

As described in Chapter 3.9 (Hydrology and Water Quality), implementation of the proposed General Plan would result in less than significant impacts related to hydrology and water quality.

All of the alternatives generally would allow development to occur in a manner similar to the proposed General Plan within a highly urbanized environment, where flood control and water quality protection measures are well established and enforced. This variation in intensity and land use designation changes would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing Federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impacts on groundwater supplies. Impacts for each alternative, like the proposed project, would be less than significant.

Alternative 3 would result in development of slightly more housing units when compared to the Proposed General Plan, but the same amount of non-residential square feet. Compared to the Proposed General Plan, the potential water quality impacts related to construction and operation would be similar. As described in Chapter 3.9, General Plan implementation would not result in construction, or long-term impacts to surface water quality from urban stormwater runoff. Future development projects, under all alternatives, would also be required to submit a SWPPP with BMPs to the RWQCB and comply with all storm water sewer system (MS4) requirements. It would be expected that impacts related to water quality would be similar under Alternatives 2 and 3 as compared to the Proposed General Plan. The implementation of the General Plan policies and actions, which include policies aimed to enhance stormwater quality and infiltration as well as actions to review development projects to identify potential stormwater and drainage impacts, and require development to include measures to ensure off-site runoff is not increased beyond pre-development levels would not be updated and included under Alternative 1, as this alternative does not include an update to the General Plan Policy Document to include updated policies related to permeable surfaces onsite detention, and infiltration. Therefore, this impact under the No Project Alternative may be slightly increased when compared to all other alternatives.

Land Use Planning and Population/Housing

The proposed General Plan and Alternative 3 are long-range land use plans. As described in Chapter 3.10 (Land Use, Population, and Housing), all impacts related to land use, population, and housing were found to be less than significant under the proposed General Plan. As described previously, the proposed General Plan and Alternative 3 would include adoption of the updated policy document. Therefore, Alternative 3 would result in the same impact level as the Proposed General Plan. Alternative 3 would update current land use designations, and the updated General Plan would be more effective than Alternative 2 in promoting and encouraging more compact urban development and revitalization through additional opportunities for high density residential development. In addition, numerous programs and policies within the Proposed General Plan's policy document allow for greater consistency with applicable state and regional plans versus the existing General Plan and would promote efficiency in the delivery of urban services, and local agency coordination. Finally, the amount and typology of allowable development under the Proposed General Plan, and Alternative 3 has been crafted with a mind to position Milpitas to meet the City's housing obligations and to meet its Regional Housing Needs Allocation (RHNA) for future housing needs. Continuation of the existing General Plan and its housing element may not enable the City to meet future RHNA obligations for State housing

certification. Both the proposed General Plan and Alternative 3 would assist the City in developing adequate housing units to meet State requirements. Therefore, impacts under Alternative 3 would be equal to those of the proposed project.

Mineral Resources

As described in Chapter 3.11, the proposed General Plan would result in less than significant impacts relating mineral resources. All of the alternatives, like the Proposed General Plan, accommodate development generally in the same areas, and these areas are for the most part already urbanized. Given that mineral resources would not be impacted by the proposed project, impacts associated with each of the alternatives would be the same, and all would remain less than significant.

Noise

As described in Chapter 3.12 and 4.0, the proposed General Plan would result in significant noise impacts. Buildout of the General Plan would contribute to transportation noise and in increases in traffic noise levels at existing sensitive receptors. And described in Chapter 3.12, the proposed General Plan and Alternative 3 include General Plan policies intended to minimize exposure to excessive noise, including noise associated with traffic. Additional updated policies would ensure that new development mitigates potential noise impacts to the greatest extent feasible through incorporating the noise control treatments necessary to achieve acceptable noise levels, and sets criteria for evaluating future increases in traffic noise levels.

Alternative 3 would result in additional residential developments, and slight increased traffic. In addition higher density development may place more receptors and activity areas with close proximity to transportation sources and this may increase exposure to transportation noise impacts. As such, noise impacts would be slightly increased under this alternative when compared to the proposed General Plan.

Public Services and Recreation

As described in Chapter 3.13, the proposed General Plan would result in less than significant impacts relating public services and recreation. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The proposed General Plan includes policies and actions that require payment of impact fees to the City and other public agencies to ensure that additional development allowed does not have adverse impacts on these services and agencies.

Under Alternative 3, the development area and development types would remain similar, however, there would be slightly more dwelling units and a greater population increase when compared to the proposed General Plan and thus, impacts to public services (the demand for police, fire and other public services) would be slightly greater when compared to the proposed General Plan.

Transportation

As described in Chapter 3.14 (Transportation and Circulation), the proposed General Plan would result in significant and unavoidable impacts to the circulation network.

As described in Section 3.14 (Transportation and Circulation), the average residential VMT per capita is expected to decrease by 14.3% from 12.87 under the existing General plan to 11.03 under the proposed General Plan and average employment VMT per employee is expected to slightly increase by approximately 0.19% from 20.37 under the existing General Plan to 20.41 under the proposed General Plan Update. The average VMT per capita resulting from buildout of the General Plan was assessed using a significance threshold based on the countywide average for Santa Clara County. The projected VMT per employee for the City of Milpitas is nearly 31 percent higher than the applied significance threshold while the projected VMT per resident is about four percent lower than the applied significance threshold. As a result, the VMT impacts associated with employment-based uses allowed by the proposed General Plan were considered significant and unavoidable.

Under Alternative 3, the Planning Area would be developed with slightly more housing units when compared to the Proposed General Plan, but the same amount of non-residential square feet. Therefore, it is anticipated that the average employment VMT per employee would be the same under Alternative 3 and the proposed General Plan. While the increase in total residential unit count and population has the potential to increase the total residential vehicle miles traveled, the density intensification and the increases in mixed use developments under Alternative 3 are generally seen to increase opportunities for walking and bicycling and provide additional opportunities for trip internalization. Therefore, the transportation impacts are anticipated to be similar under Alternative 3 and the proposed General Plan. Additionally, the updated land use maps under the proposed General Plan and Alternative 3 includes a more balanced mix of uses as part of mixed-use developments and additional opportunities for increased densities as part of mixed-use developments which includes opportunities for trip internalization, and increased opportunities for walking and bicycling. Therefore, the transportation impacts are slightly reduced under Alternative 3 and the proposed General Plan when compared to Alternative 2 and Alternative 1 (No Project), which implement the existing General Plan Land Use Map.

Utilities

As described in Chapter 3.15, the proposed General Plan would result in less than significant impacts relating to utilities.

New development would place increased demands on utilities. Under Alternative 3, the Planning Area would be developed with similar development patterns and uses as the proposed General Plan, however, the overall residential intensity/density, and population increases would be increased only slightly. The quantity of infrastructure installed would not be substantially reduced as all alternatives would require similar development patterns and footprints, but the demand for utility services including wastewater and solid waste services would be slightly more than would be required under the proposed General Plan.

Separately, the total storm drainage runoff under this alternative would be approximately the same when compared to the proposed project, due to the general development footprint remaining the same for this alternative when compared to the proposed General Plan.

Therefore, demand for utilities would be substantially similar under Alternative 3 when compared to the proposed project, and a greater impact when compared to Alternatives 1 and 2 which include less overall development and would include the least amounts of growth and subsequent demand for utility services.

Wildfire

Impact 3.8-6 was found to be significant as the proposed General Plan has the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires as a result of existing and future development t located within areas of high fire hazard severity.

As described in Chapter 3.16 (Wildfire), the proposed General Plan would result in less than significant impacts relating to all other wildfire impacts. All alternatives would result in similar development patterns and a similar development footprints. However because Alternative 3 would update policies to include new policies and actions related to agency coordination, consultation, and monitoring consistent with the proposed General Plan Policy Document, impacts related to wildfire would be slightly reduced when compared to the No Project Alternative, which does not include additional and updated policies and actions aimed reducing the risk of wildfire hazards. The impact under all other scenarios (the Proposed General Plan, and Alternatives 2 and 3) would remain the same.

Irreversible Effects

The proposed General Plan would have a significant and unavoidable impact associated with irreversible environmental effects as described under Impact 4.17. Implementation of the proposed General Plan would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the General Plan would result in irretrievable commitments by introducing development onto sites that are presently undeveloped. Additionally, development will physically change the environment in terms of aesthetics, air emission, noise, traffic, open space, and natural resources. These physical changes are irreversible after development occurs. Therefore, the proposed General Plan would result in changes in land use within the Planning Area that would commit future generations to these uses.

During the planning horizon, development under Alternative 3 would be similar in comparison to the proposed General Plan. Under cumulative conditions, Alternative 3 would result slightly more residential development, but equal non-residential floor area (see Table 5.0-1). Alternative 3 would use nonrenewable resources, including metals, stone, and other materials related to construction, and result in on-going demand for fossil fuels and other resources associated with energy production at levels greater than the proposed project. The associated irretrievable commitment of nonrenewable resources and permanent conversion of undeveloped lands under Alternative 3 would remain a significant impact. Alternative 3 would have similar impacts in comparison to the proposed General Plan.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed General Plan.

A comparative analysis of the proposed General Plan and each of the Project alternatives is provided in Table 5.0-5 below. The table includes a numerical scoring system, which assigns a score of 1 to 5 to each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of "3" indicates that the alternative would have the same level of impact when compared to the proposed project. A score of "1" indicates that the alternative would have a better (or reduced) impact when compared to the proposed project. A Score of "2" indicates that the alternative would have a slightly better (or slightly reduced) impact when compared to the proposed project. A score of "4" indicates that the alternative would have a slightly worse (or slightly increased) impact when compared to the proposed project. A score of "5" indicates that the alternative would have a worse (or increased) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

As shown in Table 5.0-5, Alternative 2 (Reduced Mixed Growth Alternative) is the environmentally superior alternative when looked at in terms of all potential environmental impacts. All of the alternatives fail to reduce any significant and unavoidable impacts to a less than significant level. Throughout the preparation of the General Plan Update, the City Council, Planning Commission, and GPAC all expressed a desire and commitment to ensuring that the General Plan not only reflect the community's values and priorities, but also serve as a self-mitigating document and avoid significant environmental impacts to the greatest extent feasible. To that end, the proposed General Plan includes the fully range of feasible mitigation available to reduce potential impacts to the greatest extent possible.

TABLE 5.0-5: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	*PROPOSED PROJECT*	*ALTERNATIVE 1 (NO PROJECT)*	*ALTERNATIVE 2 (MODIFIED)*	*ALTERNATIVE 3 (INCREASED DENSITY)*
Aesthetics	3 – Same	2 – Slightly Better	2 – Slightly Better	4 – Slightly Worse
Agricultural Resources	3 – Same	3 – Same	3 – Same	3 - Same
Air Quality	3 – Same	5 – Worse	4 – Slightly Worse	3 – same
Biological Resources	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Cultural Resources	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Geology and Soils	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Greenhouse Gases, Climate Change, and Energy	3 – Same	5 – Worse	4 – Slightly Worse	2 – Slightly Better
Hazards and Hazardous Materials	3 – Same	2 – Slightly Better	2 – Slightly Better	4 – Slightly Worse
Hydrology and Water Quality	3 – Same	4 – Slightly Worse	3 – Same	3 – Same
Land Use and Population	3 – Same	4 – Slightly Worse	4 – Slightly Worse	3 – Same

ENVIRONMENTAL ISSUE	*PROPOSED PROJECT*	*ALTERNATIVE 1 (NO PROJECT)*	*ALTERNATIVE 2 (MODIFIED)*	*ALTERNATIVE 3 (INCREASED DENSITY)*
Noise	3 – Same	2 – Slightly Better	2 – Slightly Better	4 – Slightly Worse
Public Services and Recreation	3 – Same	2 – Slightly Better	2 – Slightly Better	3 – Same
Transportation and Circulation	3 – Same	4 – Slightly Worse	4 – Slightly Worse	3 – Same
Utilities	3 – Same	2 – Slightly Better	2 – Slightly Better	3 – Same
Wildfire	3 – Same	3 – Same	3 – Same	3 – Same
Irreversible Effects	3 – Same	2 – Slightly Better	2 – Slightly Better	3 – Same
SUMMARY	**48**	**52**	**46**	**50**

Overall, Alternative 2 is the environmentally superior alternative as it is the most effective in terms of overall reductions of impacts compared to the proposed General Plan and all other alternatives. As such, Alternative 2 is the environmentally superior alternative for the purposes of this EIR analysis.

SATISFACTION OF PROJECT OBJECTIVES

Alternative 1

As described previously Alternative 1 failed to meet the most basic Project Objectives and thus was not further considered. Alternative 1 fails to meet several of the basic Project Objectives, including the following: 3. Attract and retain businesses and industries that provide high-quality and high-paying jobs; 4. Expand and improve neighborhood serving shopping areas to provide better local services near neighborhoods, and increased sales tax revenues; 5. Continue to maintain and improve multimodal transportation opportunities; 7. Address new requirements of State law; and 8. Address emerging transportation, housing, and employment trends.

Alternative 2

Like The Proposed Project, Alternative 2 reflects the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders; through the updated policy document, and addresses new requirements of State law, including climate resiliency planning, environmental justice, complete streets, etc. Alternative 2 meets most Project Objectives. However, without the updated Land Use Map, Alternative 2 provides less high-quality housing options; and doesn't not meet the General Plan's Objectives to attract and retain businesses and industries that provide high-quality and high-paying jobs when compared to the Proposed Project's Innovation Area, and Business Park Research and Development land uses to address emerging employment needs and trends. Additionally an objective of the General Plan is to expand and improve neighborhood-serving shopping areas to provide better local services near neighborhoods. The proposed Project does this through newly established commercial and mixed use areas included within the Neighborhood Commercial, and Neighborhood Commercial Mixed Use land use designations that Alternative 2 would not implement. Thus, Alternative 2 fails to meet several Project Objectives as it retains the existing Land Use Map and designations and does not implement updated land uses that are central to meeting the proposed Project's Objectives.

Alternative 3

Like the proposed Project, Alternative 3 would satisfy all Project Objectives as it would adopt the updated policy document as well as the updated Land Use Map. This alternative would update the land use descriptions to allow greater residential densities and would allow for more growth that would be allowed under the proposed Project. Although Alternative 3 meets all Project Objectives as described throughout this section and displayed in Table 5.0-5, Alternative 3 would be slightly environmentally inferior to the proposed project, and would not reduce any significant impacts to a less than significant level.

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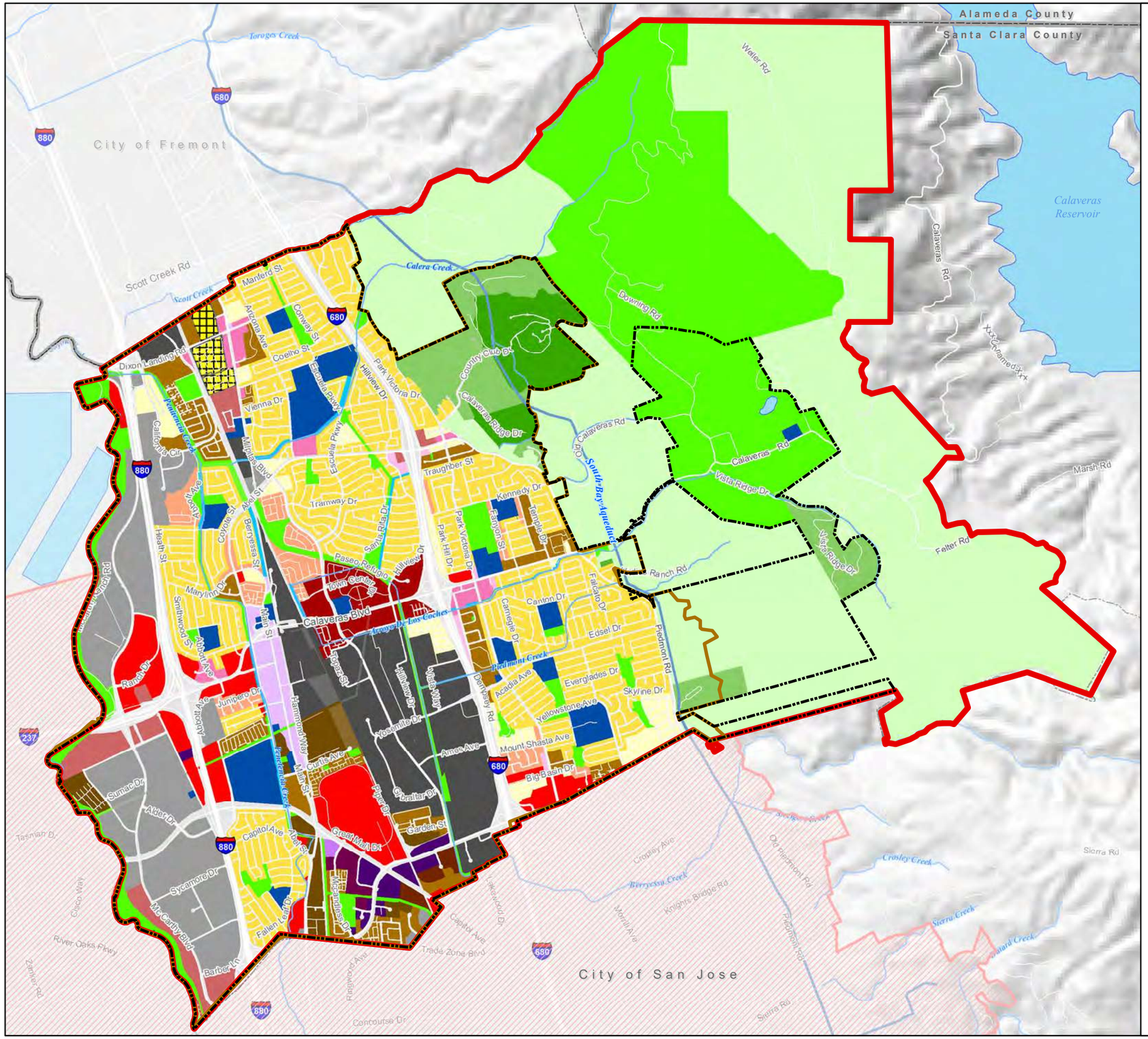
CITY OF MILPITAS
GENERAL PLAN UPDATE

Figure 5.0-1. Existing General Plan Land Use Map



Legend

General Plan Land Use Designation

- HVL - Hillside Very Low Density
- HLD - Hillside Low Density
- HMD - Hillside Medium Density
- SFL - Single Family Low Density
- SMD - Single Family Medium Density
- MFM - Multi-Family Medium Density
- MFH - Multi-Family High Density
- VHD - Multi-Family Very High Denisty
- URR - Urban Residential
- MHP - Mobile Home Park
- MXD - Mixed Use
- RRMU - Residential Retail High Density Mixed Use
- BVMU - Boulevard Very High Density Mixed Use
- HDTOR - High Density Transit Oriented
- PAO - Professional & Administrative Office
- RSC - Retail Subscenter
- GNC - General Commercial
- HWS - Highway Service
- TWC - Town Center
- MFG - Manufacturing
- INP - Industrial Park
- PF - Public Facilities
- POS - Permanent Open Space
- WW - Waterway

Planning Areas

- City of Milpitas
- Milpitas Sphere of Influence
- Milpitas Urban Service Area
- Other City Boundaries - Fremont and San Jose
- San Jose Planning Limits of Urban Growth
- County Boundary

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Sources: City of Milpitas GIS; Santa Clara County GIS; Alameda County GIS; USGS National Hydrography Dataset; CalAtlas; General Plan Data v3. Map date:October 28, 2016.

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Santa Clara County - Clerk-Recorder Office
State of California

County of Santa Clara

Office of the County Clerk-Recorder
Business Division

County Government Center
70 West Hedding Street, E. Wing, 1st Floor
San Jose, California 95110 (408) 299-5688

File Number: ENV23201

ENVIRONMENTAL FILING
No. of Pages: 16
Total Fees: $3495.25
File Date: 03/12/2021
Expires: 04/11/2021

REGINA ALCOMENDRAS, Clerk-Recorder
By: Elaine Fader, Deputy Clerk-Recorder

CEQA DOCUMENT DECLARATION

ENVIRONMENTAL FILING FEE RECEIPT

PLEASE COMPLETE THE FOLLOWING:

1. LEAD AGENCY: City of Milpitas - Planning Department
2. PROJECT TITLE: MILPITAS GENERAL PLAN UPDATE (SCH: 2020070348)
3. APPLICANT NAME: Jessica Garner, Planning Manager PHONE: 408-586-3284
4. APPLICANT ADDRESS: 455 East Calaveras Boulevard, Milpitas, CA 95035
5. PROJECT APPLICANT IS A: ☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity
6. NOTICE TO BE POSTED FOR 30 DAYS.
7. CLASSIFICATION OF ENVIRONMENTAL DOCUMENT

a. PROJECTS THAT ARE SUBJECT TO DFG FEES

☒ 1. ENVIRONMENTAL IMPACT REPORT (PUBLIC RESOURCES CODE §21152)	$	3,445.25	$ 3,445.25
☐ 2. NEGATIVE DECLARATION (PUBLIC RESOURCES CODE §21080(C)	$	2,480.25	$ 0.00
☐ 3. APPLICATION FEE WATER DIVERSION (STATE WATER RESOURCES CONTROL BOARD ONLY)	$	850.00	$ 0.00
☐ 4. PROJECTS SUBJECT TO CERTIFIED REGULATORY PROGRAMS	$	1,171.25	$ 0.00
☒ 5. COUNTY ADMINISTRATIVE FEE (REQUIRED FOR a-1 THROUGH a-4 ABOVE) Fish & Game Code §711.4(e)	$	50.00	$ 50.00

b. PROJECTS THAT ARE EXEMPT FROM DFG FEES

☐ 1. NOTICE OF EXEMPTION ($50.00 COUNTY ADMINISTRATIVE FEE REQUIRED)	$	50.00	$ 0.00
☐ 2. A COMPLETED "CEQA FILING FEE NO EFFECT DETERMINATION FORM" FROM THE DEPARTMENT OF FISH & GAME, DOCUMENTING THE DFG'S DETERMINATION THAT THE PROJECT WILL HAVE NO EFFECT ON FISH, WILDLIFE AND HABITAT, OR AN OFFICIAL, DATED RECEIPT / PROOF OF PAYMENT SHOWING PREVIOUS PAYMENT OF THE DFG FILING FEE FOR THE *SAME PROJECT IS ATTACHED ($50.00 COUNTY ADMINISTRATIVE FEE REQUIRED)			
DOCUMENT TYPE: ☐ ENVIRONMENTAL IMPACT REPORT ☐ NEGATIVE DECLARATION	$	50.00	$ 0.00

c. NOTICES THAT ARE *NOT* SUBJECT TO DFG FEES *OR* COUNTY ADMINISTRATIVE FEES

☐ NOTICE OF PREPARATION ☐ NOTICE OF INTENT	NO FEE	$ NO FEE

8. OTHER: _____ FEE (IF APPLICABLE): $_____
9. TOTAL RECEIVED..... $ 3,495.25

*NOTE: "*SAME PROJECT*" MEANS NO CHANGES. IF THE DOCUMENT SUBMITTED IS NOT THE SAME (OTHER THAN DATES), A "NO EFFECT DETERMINATION" LETTER FROM THE DEPARTMENT OF FISH AND GAME FOR THE SUBSEQUENT FILING OR THE APPROPRIATE FEES ARE REQUIRED.

THIS FORM MUST BE COMPLETED AND ATTACHED TO THE FRONT OF ALL CEQA DOCUMENTS LISTED ABOVE (*INCLUDING COPIES*) SUBMITTED FOR FILING. WE WILL NEED AN ORIGINAL (WET SIGNATURE) AND TWO (2) COPIES. IF THERE ARE ATTACHMENTS, PLEASE PROVIDE THREE (3) SETS OF ATTACHMENTS FOR SUBMISSION. *(YOUR ORIGINAL WILL BE RETURNED TO YOU AT THE TIME OF FILING.)*

CHECKS FOR ALL FEES SHOULD BE MADE PAYABLE TO: SANTA CLARA COUNTY CLERK-RECORDER

PLEASE NOTE: FEES ARE ANNUALLY ADJUSTED (Fish & Game Code §711.4(b); PLEASE CHECK WITH THIS OFFICE AND THE DEPARTMENT OF FISH AND GAME FOR THE LATEST FEE INFORMATION.

"... NO PROJECT SHALL BE OPERATIVE, VESTED, OR FINAL, NOR SHALL LOCAL GOVERNMENT PERMITS FOR THE PROJECT BE VALID, UNTIL THE FILING FEES REQUIRED PURSUANT TO THIS SECTION ARE PAID." Fish & Game Code §711.4(c)(3)

(Fees Effective 01-01-2021)

State of California - Department of Fish and Wildlife

2021 ENVIRONMENTAL FILING FEE CASH RECEIPT

DFW 753.5a (REV. 01/01/21) Previously DFG 753.5a

RECEIPT NUMBER: 01 - ENV23201

STATECLEARINGHOUSE NUMBER *(If applicable)*

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEAD AGENCY EMAIL	DATE
CITY OF MILPITAS - PLANNING DEPARTMENT		03/12/2021
COUNTY/STATE AGENCY OF FILING		**DOCUMENT NUMBER**
SANTA CLARA		

PROJECT TITLE

MILPITAS GENERAL PLAN UPDATE (SCH: 2020070348)

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
JESSICA GARNER, PLANNING MANAGER		(408) 586-3284
PROJECT APPLICANT ADDRESS	**CITY** / **STATE**	**ZIP CODE**
455 EAST CALAVERAS BLVD	MILPITAS / CA	95035

PROJECT APPLICANT *(Check appropriate box)*

☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☒ Environmental Impact Report (EIR)	$3,445.25	$ 3,445.25
☐ Mitigated/Negative Declaration (MND)(ND)	$2,480.25	$
☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW	$1,171.25	$

☐ Exempt from fee

- ☐ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$850.00	$
☒ County documentary handling fee		$ 50.00
☐ Other		$

PAYMENT METHOD:

☐ Cash ☐ Credit ☒ Check ☐ Other **TOTAL RECEIVED** $ 3,495.25

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
X Elaine Fader	Elaine Fader, Deputy County Clerk-Recorder

ORIGINAL - PROJECT APPLICANT | COPY - CDFW/ASB | COPY - LEAD AGENCY | COPY - COUNTY CLERK | DFW 753.5a (Rev 06012020)

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Santa Clara
Address: 70 West Hedding Street, 1st Floor
San Jose, CA 95110

From:

Public Agency: City of Milpitas, Planning Dept.
Address: 455 East Calaveras Boulevard
Milpitas, CA 95035
Contact: Jessica Garner, Planning Manager
Phone: 408-586-3284

Lead Agency (if different from above):
same as above
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2020070348

Project Title: MILPITAS GENERAL PLAN UPDATE

Project Applicant: Jessica Garner, Planning Manager

Project Location (include county): Milpitas - Santa Clara County

Project Description:

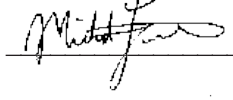
Comprehensive update to the Milpitas General Plan and Land Use Map.

This is to advise that the City of Milpitas has approved the above
(☒ Lead Agency or ☐ Responsible Agency)

described project on March 9, 2021 (date) and has made the following determinations regarding the above described project.

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☐ were ☒ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☐ was ☒ was not] adopted for this project.
5. A statement of Overriding Considerations [☒ was ☐ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
455 East Calaveras Boulevard, Milpitas, CA 95035

Signature (Public Agency):  Title: Sr. Planner

Date: 3/11/2021 Date Received for filing at OPR:

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

FINAL

ENVIRONMENTAL IMPACT REPORT

FOR THE

MILPITAS GENERAL PLAN UPDATE

(SCH: 2020070348)

JANUARY 2020

Prepared for:

City of Milpitas
Planning Department
455 East Calaveras Boulevard
Milpitas, CA 95035

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
www.denovoplanning.com

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

FINAL
ENVIRONMENTAL IMPACT REPORT

FOR THE

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FINAL EIR

Chapter **Page Number**

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1.1 PURPOSE AND INTENDED USES OF THE EIR

CEQA REQUIREMENTS FOR A FINAL EIR

This Final Environmental Impact Report (FEIR) for the proposed Milpitas General Plan has been prepared in accordance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines. State CEQA Guidelines Section 15132 requires that an FEIR consist of the following:

- The Draft Environmental Impact Report (Draft EIR) or a revision of the draft;
- Comments and recommendations received on the Draft EIR, either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- The responses of the lead agency to significant environmental issues raised in the review and consultation process; and
- Any other information added by the lead agency.

In accordance with State CEQA Guidelines Section 15132(a), the Draft EIR is incorporated by reference into this Final EIR.

An EIR must disclose a proposed project's expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its significant adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize significant environmental impacts of proposed development, and creates an obligation for such agencies to balance a variety of public objectives, including economic, environmental, and social factors.

PURPOSE AND USE

The City of Milpitas has determined that a program-level EIR was required for the proposed General Plan Update (herein the General Plan) Project (proposed project) pursuant to the requirements of CEQA. The Draft EIR focuses on the environmental effects related to aesthetics, agriculture, air quality, biological resources, cultural and tribal resources, geology and soils, greenhouse gases, climate change and energy, hazards and hazardous material, hydrology and water quality, land use and population, mineral resources, noise, public services, transportation and circulation, utilities, and wildfire.

The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend potentially feasible methods to eliminate or reduce potential significant adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding or lessening significant adverse environmental effects, the lead agency must balance such significant adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

1.0 INTRODUCTION

This document and the Draft EIR, as amended herein, constitute the FEIR, which will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the proposed project. Subsequent actions that may be associated with the proposed project are identified in Chapter 2.0, Project Description, of the Draft EIR.

1.2 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION AND INITIAL STUDY

The City circulated a Notice of Preparation (NOP) of an EIR for the proposed project on July 17, 2020 to responsible and trustee agencies, the State Clearinghouse, and the public. A virtual public scoping meeting was held on August 11, 2020 at 11:00 a.m., to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and responses to the NOP by interested parties are presented in **Appendix A** of the Draft EIR (six comment letters were received).

NOTICE OF AVAILABILITY AND DRAFT EIR

The City published a public Notice of Availability (NOA) for the Draft EIR on November 2, 2020 thereby soliciting comments from the general public, agencies, organizations, and other interested parties. The NOA was filed with the State Clearinghouse (SCH # 2020070348) and the County Clerk, and was published in a regional newspaper pursuant to the public noticing requirements of CEQA. The Draft EIR was available for a 45 day public review extending from November 2, 2020 to December 17, 2020. The Draft EIR contains a description of the project, descriptions of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies environmental subject areas for which the City determined that there would be no impacts or less than significant impacts, and provides detailed analysis of potentially significant and significant impacts.

RESPONSE TO COMMENTS/FINAL EIR

The City of Milpitas received zero (0) comment letters during the Draft EIR public review period. This document and the Draft EIR, constitute the Final EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City Council of Milpitas will review and consider the Draft EIR together with the Final EIR. In order to take actions based upon the Final EIR (such as approving the proposed project or an alternative), the City Council must first "certify" the document under State CEQA Guidelines section 15090. Certification consists of three separate findings to the effect that "(1) The final EIR has been

completed in compliance with CEQA; (2) The final EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and (3) The final EIR reflects the lead agency's independent judgment and analysis." In addressing the first of these three issues, the City Council may find that the Final EIR complies with CEQA if the Council finds that the Final EIR is "adequate and complete." The rule of adequacy generally holds that a Final EIR can be certified if:

1) The EIR shows a good faith effort at full disclosure of environmental information; and

2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

Upon review and consideration of the certified Final EIR, the City Council may take action to approve, revise, or reject the proposed project. A decision to approve the proposed project, for which this FEIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Section 15091 and a statement of overriding considerations in accordance with State CEQA Guidelines Section 15093. A Mitigation Monitoring Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the proposed project to reduce or avoid significant effects on the environment.

1.3 ORGANIZATION OF THE FINAL EIR

This Final EIR has been prepared consistent with Section 15132 of the State CEQA Guidelines, which identifies the content requirements for Final EIRs. This Final EIR is organized in the following manner:

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 (this chapter) briefly describes the purpose of the environmental evaluation, identifies the lead agency (the City), summarizes the process associated with preparation and certification of an EIR, and identifies the content requirements and organization of the Final EIR.

CHAPTER 2.0 – COMMENTS ON THE DRAFT EIR AND RESPONSES

Chapter 2.0 provides a list of commenters, copies of written comments made on the Draft EIR (coded for reference), and responses to significant environmental issues raised in those written comments. As noted previously, there were no comments submitted on the Draft EIR.

CHAPTER 3.0 - ERRATA

Chapter 3.0 consists of any minor revisions to the Draft EIR in response to comments on the Draft EIR, as well as minor staff edits. The revisions to the Draft EIR do not change the intent or content of the analysis or mitigation.

CHAPTER 4.0 - REPORT PREPARERS

Chapter 4.0 lists authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

2.1 LIST OF COMMENTERS AND COMMENT RESPONSES

As noted in the previous chapter of this Final EIR, the City did not receive any comments during the 45-day review period for the Draft EIR. As such, there are no comments to list and no responses to provide.

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This chapter includes any minor edits to the FEIR. As described in FEIR Chapter 2.0, no comments were received on the Draft EIR. Therefore, no changes to the FEIR resulting from comments are warranted.

3.1 REVISIONS TO THE DRAFT EIR

EXECUTIVE SUMMARY

No changes were made to the Executive Summary of the Draft EIR (DEIR).

1.0 INTRODUCTION

No changes were made to Chapter 1.0 of the DEIR.

2.0 PROJECT DESCRIPTION

No changes were made to Chapter 2.0 of the DEIR

3.1 AESTHETICS

No changes were made to Section 3.1 of the DEIR.

3.2 AGRICULTURAL AND FOREST RESOURCES

No changes were made to Section 3.2 of the DEIR.

3.3 AIR QUALITY

No changes were made to Section 3.3 of the DEIR.

3.4 BIOLOGICAL RESOURCES

No changes were made to Section 3.4 of the DEIR.

3.5 CULTURAL AND TRIBAL RESOURCES

No changes were made to Section 3.5 of the DEIR.

3.6 GEOLOGY

No changes were made to Section 3.6 of the DEIR.

3.7 GREENHOUSE GAS EMISSIONS AND ENERGY

No changes were made to Chapter 3.7 of the DEIR.

3.8 HAZARDS AND HAZARDOUS MATERIALS

No changes were made to Section 3.8 of the DEIR.

3.9 HYDROLOGY AND WATER QUALITY

No changes were made to Chapter 3.9 of the DEIR.

3.10 LAND USE PLANNING AND POPULATION/HOUSING

No changes were made to Section 3.10 of the DEIR.

3.11 MINERAL RESOURCES

No changes were made to Section 3.11 of the DEIR.

3.12 NOISE

No changes were made to Section 3.12 of the DEIR.

3.13 PUBLIC SERVICES AND RECREATION

No changes were made to Section 3.13 of the DEIR.

3.14 TRANSPORTATION

No changes were made to Section 3.14 of the DEIR.

3.15 UTILITIES AND SERVICE SYSTEMS

No changes were made to Section 3.15 of the DEIR.

3.16 WILDFIRE

No changes were made to Section 3.16 of the DEIR.

4.0 CUMULATIVE/OTHER CEQA-REQUIRED TOPICS

No changes were made to Section 4.0 of the DEIR.

5.0 ALTERNATIVES

No changes were made to Chapter 5.0 of the DEIR.

6.0 REPORT PREPARERS

No changes were made to Chapter 6.0 of the DEIR.

7.0 REFERENCES

No changes were made to Chapter 7.0 of the DEIR.

REPORT PREPARERS

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