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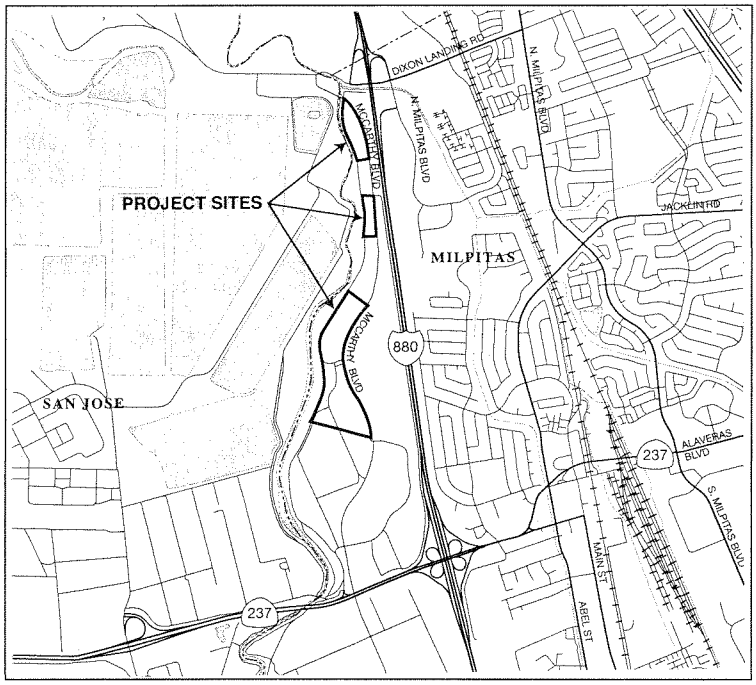
ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED McCARTHY RANCH MIXED USE PROJECT

STATE CLEARINGHOUSE #2008092082



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1. INTRODUCTION

1.1 EIR PURPOSE AND INTENDED USE

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, this ***environmental impact report*** (EIR) has been prepared by the City of Milpitas (City) to describe the environmental consequences of the proposed McCarthy Ranch Mixed Use Project. The proposed McCarthy Ranch Mixed Use Project (project) represents a final implementation phase of the City-approved McCarthy Ranch Master Plan. The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres. The project consists of a request for City approval of the General Plan and zoning entitlements, and associated CEQA documentation, necessary to permit future construction of up to approximately 1.07 million square feet of office park floor space on sites A and B and up to approximately 93,580 square feet of community shopping center floor space on site C.

The three properties are currently designated *Industrial Park and Manufacturing* on the City of Milpitas General Plan Land Use Map and *Industrial Park District* (MP) on the City of Milpitas Zoning Map, with a Zoning Ordinance-permitted maximum floor area ratio (FAR) of 0.50.[1] The proposed office park uses on sites A and B would be consistent with current General Plan and zoning allowances. The proposed community shopping center use on site C would require a General Plan amendment and rezoning from *Industrial and Manufacturing*/MP to *Community Commercial*/C2.

The City is the Lead Agency[2] for all environmental documentation and procedural requirements associated with the McCarthy Ranch Mixed Use Project. This EIR has been prepared by the City in keeping with state environmental documentation requirements set forth in the California Environmental Quality Act (CEQA). The report is intended to inform City decision-makers, other responsible agencies, and the general public of the proposed project and the environmental consequences of its approval.

This EIR is intended to serve as a public information and disclosure document identifying those environmental impacts associated with the proposed project that are expected to be significant, and describing mitigation measures and alternatives that could minimize or eliminate these significant adverse impacts.[3] Such impacts, mitigations and alternatives are discussed in this EIR to the level of detail necessary to allow reasoned decisions about the project and conditions of project approval.

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[1]The term "Floor Area Ratio" (FAR) refers to the zoning limit placed on the ratio of total building square footage (building floor area) to (divided by) site size square footage (site area). The maximum permitted FAR for the MP District is 0.50 (Milpitas Municipal Code section IX-10-35.05-5.1).

[2]The CEQA Guidelines (Sections 15000-15387, California Code of Regulations, Title 14, Chapter 3) define the "Lead Agency" as the public agency that has the principal responsibility for carrying out or approving a project.

[3]CEQA Guidelines section 15149(b).

As used in this EIR, the terms "McCarthy Ranch Mixed Use Project" and "project" are intended to be synonymous and refer to all aspects of the current development plan proposal, including the requested proposed General Plan Amendment and rezoning approvals. As a result of the information in this EIR, the Milpitas City Council may act to approve or deny the requested actions, and/or to establish associated requirements or conditions on project design, construction, and operation deemed warranted to mitigate identified project impacts on the environment.

As the Lead Agency, the City also intends for this EIR to serve as the CEQA-required environmental documentation for consideration of this project by other Responsible Agencies[1] and Trustee Agencies,[2] potentially including, but not limited to, the San Francisco Regional Water Quality Control Board (RWQCB) and the Santa Clara Valley Transportation Authority (VTA).

As stipulated by CEQA, the scope of this EIR is limited to the description of those project-related impacts and mitigation measures that can be identified at this time, without being highly speculative. The more detailed impacts of future individual, site-specific discretionary actions that may be required to develop the project sites under the requested General Plan, rezoning and FAR entitlements, but are not yet specifically described, including S-Zone[3] review of future office park and community commercial site plans and architectural plans, are not evaluated in this EIR. The additional CEQA-required environmental review of such subsequent individual actions will be undertaken at a later time when such actions come before the City in the form of a specific S-Zone Site Development Permit application. At that time, when the site plan, architectural and other details of the individual action are sufficiently defined, the action will be subject to its own, project-specific, environmental determination by the City that either: (1) it is fully covered within the scope of this EIR, (2) it warrants preparation of a Negative Declaration or Mitigated Negative Declaration tiered upon this EIR (under sections 21064.5 et al. of the Public Resources Code), or (3) it substantially exceeds the development parameters assumed in this EIR and therefore warrants preparation of a focused EIR limited to certain site-specific issues. It is intended that this General Plan Amendment and rezoning EIR will provide the City-certified environmental document for use as the baseline and context for "tiering" any such subsequent, more focused environmental documentation.

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[1]Under the CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR.

[2]Under the CEQA Guidelines, the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California.

[3]The McCarthy Ranch Master Plan area, including the three project sites, are within and subject to the combining regulations established for the City's "S" Site and Architectural Review Overlay District, or "S-zone," which is a Zoning Ordinance-established overlay district "that promotes orderly, attractive and harmonious development" and "recognizes environmental limitations on development" by requiring site and architectural design review by the Planning Commission and associated issuance of "Site Development Permits."

1.2 EIR SCOPE--SIGNIFICANT ISSUES AND CONCERNS

As required by the state CEQA Guidelines,[1] the scope of this EIR includes all environmental issues to be resolved and all areas of environmental controversy known to the Lead Agency (the City), including those issues and concerns identified as possibly significant by the City in its preliminary environmental review (Initial Study[2]) of the project; and by other agencies, organizations, and individuals in response to the City's Notice of Preparation (dated October 15, 2008).[3] These environmental concerns include (listed in the order that these topics are listed in CEQA Guidelines Appendix G and are addressed in this EIR):

1. Aesthetics,
2. Agricultural resources,
3. Air quality,
4. Biological resources,
5. Cultural resources,
6. Geology and soils,
7. Hazards and hazardous materials,
8. Hydrology and water quality,
9. Land use and planning,
10. Noise,
11. Public services, utilities and service systems, and
12. Transportation and circulation.

1.3 "SIGNIFICANT IMPACTS" AND OTHER KEY EIR TERMINOLOGY

This EIR identifies those adverse environmental impacts associated with the project that are expected to be "significant," and corresponding mitigation measures warranted to eliminate or reduce those impacts to "less-than-significant" levels. Where it is determined in this report that a particular impact cannot be mitigated to a less-than-significant level, the EIR identifies that impact as "unavoidable." Section 16.2 of the EIR (Unavoidable Significant Adverse Impacts) includes a summary list of all significant adverse project impacts identified as "unavoidable." Identified significant adverse impacts that are not listed in section 16.2 as "unavoidable" can be mitigated to a less-than-significant level by implementation of the associated mitigation measure or measures identified in this EIR.

These particular EIR terms ("significant," "unavoidable," "mitigation") and other key CEQA terminology used in this report are defined in the box on the following page.

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[1]Guidelines for Implementation of the California Environmental Quality Act, Chapter 3, Title 14, California Code of Regulations, as amended July 27, 2007.

[2]The City's Initial Study for the McCarthy Ranch Mixed Use Project is included in appendix 20.1 of this EIR.

[3]The Notice of Preparation (NOP) is a CEQA-required brief notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, and potentially involved federal agencies that the Lead Agency plans to prepare an EIR for the project, and solicits guidance regarding EIR scope and content. The City's NOP for the McCarthy Ranch Mixed Use Project is included in appendix 20.1 of this EIR.

DEFINITIONS OF KEY EIR TERMINOLOGY

Significant/Potentially Significant Impact	"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. (CEQA Guidelines, section 15382.) *"An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."* (CEQA Guidelines, section 15382.)
Significant Cumulative Impact	"Cumulative impacts" are defined as *"two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."* (CEQA Guidelines, section 15355.)
Unavoidable Significant Impact	"Unavoidable significant impacts" are defined as those significant adverse environmental impacts for which either no mitigation or only partial mitigation is feasible. If the project is to be approved without imposing an alternative design, the Lead Agency (the City) must include in the record of the project approval a written statement of the specific reasons to support its action--i.e., a "statement of overriding considerations." (CEQA Guidelines, sections 15126.2(b) and 15093(b).)
Significance Criteria	The criteria used in this EIR to determine whether an impact is or is not *"significant"* are based on (a) CEQA-stipulated "mandatory findings of significance"--i.e., where any of the specific conditions occur under which the Legislature and the Secretary of Resources have determined to constitute a potentially significant effect on the environment, which are listed in CEQA Guidelines section 15065; (b) the relationship of the project effect to the adopted policies, ordinances and standards of the City and of responsible agencies; and/or (c) commonly accepted practice and the professional judgment of the EIR authors and Lead Agency staff.
Mitigation Measures	For each significant impact, the EIR must identify a specific "mitigation" measure or set of measures capable of *"(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) reducing or eliminating the impact over time by preservation or maintenance operations during the life of the action; or (e) compensating for the impact by replacing or providing substitute resources or environments."* (CEQA Guidelines, section 15370.)

SOURCE: Wagstaff and Associates, 2008.

1.4 REPORT ORGANIZATION AND CONTENT

The impact and mitigation information in this EIR is generally organized in chapters under the 12 environmental headings listed in section 1.2 above (aesthetics, agricultural resources, air quality, biological resources, etc.). Each environmental chapter includes sections describing the following for that issue:

(1) the environmental setting;

(2) pertinent plans and policies;

(3) impacts and mitigation measures (impacts anticipated with the proposed project and measures recommended to mitigate potentially significant adverse impacts).

In addition, this report includes a chapter summarizing the EIR information in terms of various **CEQA-required assessment considerations**, including project "growth-inducing impacts," "unavoidable significant adverse impacts," "irreversible environmental changes," "cumulative impacts," and "effects found not to be significant" (chapter 16); a chapter describing and comparing various **alternatives to the proposed project** (chapter 17); and a chapter outlining the City's **mitigation monitoring** intentions (chapter 18).

2. SUMMARY

This EIR chapter includes a summary description of the proposed action (the McCarthy Ranch Mixed Use Project), a list of associated environmental issues to be resolved, a summary identification of significant impacts and mitigation measures associated with the proposed project, and a summary identification and comparative evaluation of possible alternatives to the proposed project (pursuant to CEQA Guidelines section 15123, Summary).

This summary should not be relied upon for a thorough understanding of the details of the project, its individual impacts, and related mitigation needs. Please refer to chapter 3 for a complete description of the project, chapters 4 through 14 for a complete description of identified environmental impacts and associated mitigation measures, chapter 15 for a description of project consistency with local and regional plans, chapter 16 for a summary of CEQA-required assessment considerations, and chapter 17 for a complete description and evaluation of identified alternatives to the project.

2.1 PROPOSED PROJECT

2.1.1 Project Location and Site Characteristics

The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres, located in the developing McCarthy Ranch Master Plan area along the west side of North McCarthy Boulevard between SR 237/Calaveras Boulevard and Dixon Landing Road. The west edge of each site is contiguous to the existing Coyote Creek corridor. The City of Milpitas General Plan and McCarthy Ranch Master Plan provide for development of the area with a mix of commercial, residential, research and development (R&D) and industrial park uses. The three properties are currently designated *Industrial Park and Manufacturing* on the Milpitas General Plan Land Use Map and zoned *Industrial Park* (MP) with a maximum floor area ratio (FAR) of 0.50.

2.1.2 Project Objectives

The basic objectives for the McCarthy Ranch Mixed Use Project are to respond to anticipated future market demands for additional high quality office, R&D and community-serving shopping space development opportunities in Santa Clara County, on relatively flat land with direct freeway access and existing urban infrastructure, by completing the final phase of the development program envisioned for the area in the City-adopted McCarthy Ranch Master Plan--i.e., an *Industrial Park* development program at an FAR of up to 0.50--but with a General Plan map and zoning modification to accommodate a *General Commercial* (rather than *Industrial Park*) use of site C, at an FAR of 0.23.

2.1.3 Anticipated Development Program

The proposed project includes the following mix of office park and community shopping center land uses for the three project sites:

	Site A	Site B	Site C	Total
Site size (approx.)	44.20 acres	5.00 acres	9.34 acres	58.54 acres
Assessor's Parcel No.	22-29-36 (35.01 acres) and 22-30-37 (9.19 acres)	22-30-39	22-30-48	
Existing General Plan designation	Industrial Park and Manufacturing	Industrial Park and Manufacturing	Manufacturing and Warehousing	
Proposed General Plan designation	No change	No change	General Commercial	
Existing zoning	MP (Industrial Park)	MP (Industrial Park)	MP (Industrial Park)	
Proposed zoning	No change	No change	C2 (General Commercial)	
Proposed land use	Office Park	Office Park	Community Shopping Center	
Maximum Permitted/ Proposed FAR	0.50/0.50	0.50/0.50	0.50/0.23	
Proposed maximum floor area (approx.)	962,570 sq.ft.	108,900 sq.ft.	93,580 sq.ft.	1,165,050 sq. ft

2.1.4 Required City Approvals

City of Milpitas approvals required to implement the project include:

- a General Plan amendment to change the General Plan Land Use Map designation of site C from *Industrial Park and Manufacturing* to *General Commercial*; and
- a rezoning to change the Zoning Ordinance designation of site C from *Industrial Park* (MP) to *General Commercial* (C2) to be consistent with the proposed General Plan change.

Project implementation is also expected to eventually require City approval of a Site Development Permit, including detailed project site, architectural and landscape plans; as well as subdivision tentative maps; parcel map; possible development agreement(s); possible Conditional Use Permit for commercial uses within the project Community Commercial Center component; a sign program; a demolition permit to clear existing agricultural structures on project site A; and grading permit(s), building permit(s), water and sewer hook-ups, and other ministerial actions.

2.2 ENVIRONMENTAL ISSUES

As required by the state CEQA Guidelines, the scope of this EIR includes all environmental issues to be resolved and all areas of controversy known to the Lead Agency (the City), including those issues and concerns identified as possibly significant by the City in its

preliminary environmental review (Initial Study[1]) of the project; and by other agencies, organizations, and individuals in response to the City's Notice of Preparation (dated September 16, 2008).[2]

As described in the Introduction to this EIR, these areas of environmental concern include (listed in the general order they are identified in the Initial Study):

(a) aesthetics (visual resources),
(b) air quality and climate change,
(c) biological resources,
(d) cultural resources,
(e) geology and soils,
(f) hazards and hazardous materials,
(g) hydrology and water quality,
(h) land use and agriculture,
(i) noise,
(j) public services, utilities and service systems, and
(k) transportation and circulation.

2.3 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Each *significant* impact and associated mitigation finding identified in this EIR is summarized in the following Table 2.1, SUMMARY OF IMPACTS AND MITIGATION MEASURES. The summary table has been organized to correspond with the more detailed impact and mitigation discussions in chapters 4 through 14 of this EIR. The table is arranged in five columns: (1) impacts, (2) potential significance without mitigation, (3) mitigation measures, (4) mitigation responsibility, and (5) potential significance with mitigation.

For a complete description of the environmental setting, impacts, and mitigation measures associated with each particular topic of concern, please refer to chapters 4 through 14 of this EIR.

[1]The City's Initial Study for the McCarthy Ranch Mixed Use Project, dated September 16, 2008, is included in appendix 20.1 of this EIR.

[2]The Notice of Preparation (NOP) is a CEQA-required brief notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, and potentially involved federal agencies that the Lead Agency plans to prepare an EIR for the project, and to solicit guidance regarding EIR scope and content. The City's NOP for the McCarthy Ranch Mixed Use Project, dated and distributed on September 19, 2008, is included in appendix 20.1 of this EIR.

Table 2.1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
AIR QUALITY AND CLIMATE CHANGE				
Impact 5-1: Project Demolition and Construction Period Emissions. The current project application is limited to a request for a General Plan Amendment to change the General Plan Land Use Map designation of site C from *Industrial Park and Manufacturing* to *General Commercial*, and a corresponding rezoning to change the Zoning Ordinance designation of site C from *Industrial Park* (MP) to *General Commercial* (C2). Project implementation will also require subsequent City approval of more detailed project entitlements (e.g., Site Development Permit, site, architectural and landscape plans; subdivision maps; parcel map; demolition permit to clear existing agricultural structures on site A; grading permits; building permits; sewer hook-ups; etc.). Ultimately, these subsequent project approvals will lead to construction activities, including building demolition, excavation and grading operations, associated construction vehicle traffic, and wind blowing over resultant exposed earth. These project activities would generate a combination of exhaust emissions and fugitive particulate matter emissions that would	S	**Mitigation 5-1.** Dust emissions from project demolition and construction activities can be greatly reduced by implementing fugitive dust control measures. The significance of construction impacts is, according to the BAAQMD Guidelines, determined by whether or not appropriate dust control measures are implemented. Implementation of the following conventional BAAQMD-recommended dust control measures would therefore be expected to reduce this impact to a ***less-than-significant level:*** (1) Demolition Period. Require implementation of the following dust control measures by contractors during demolition of existing structures: (a) Watering shall be used to control dust generation during demolition of structures and break-up of pavement; (b) All trucks hauling demolition debris from the site shall be covered; and	City and applicant	LS

S = Significant
LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

temporarily and intermittently affect local air quality. These possible effects represent a ***potentially significant impact.***

(c) Whenever possible, dust-proof chutes shall be used for loading debris onto trucks.

(2) All Construction Phases. Require implementation of the following dust control measures by construction contractors during all construction phases:

(a) Water all active construction areas at least twice daily and more often during windy periods. Active construction areas adjacent to existing land uses must be kept damp at all times, or must be treated with non-toxic stabilizers or dust palliatives;

(b) Water or cover all stockpiles of debris, soil, sand, or other materials that can be blown by the wind;

(c) Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard;

(d) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites;

(e) Sweep daily (preferably with water sweepers) all paved access roads,

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		parking areas, and staging areas at construction sites; (f) Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets; (g) Hydroseed or apply non-toxic soil stabilizers to inactive construction areas; (h) Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); (i) Install sandbags or other erosion control measures to prevent silt runoff to public roadways; and (j) Replant vegetation in disturbed areas as quickly as possible.		
Impact 5-2: Project Long-Term Regional Air Emissions Impact. Predicted regional emissions of reactive organic gases (ROG), nitrogen oxides (NO_x) and particulate matter (PM_{10}) generated by project vehicular trips exceed BAAQMD significance thresholds; therefore, the project would have a ***significant impact*** on long-term regional air quality.	S	**Mitigation 5-2.** In addition to the roadway improvement and transportation demand management (TDM) mitigations identified in chapter 14 (Transportation and Circulation) of this EIR, require the project to provide the following: ▪ transit facilities (e.g., bus bulbs/turnouts, benches, shelters, etc.); ▪ project-provided or fair-share participation in adequate shuttle service to regional transit stations system (i.e., the three or	City and applicant	SU

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		four closet VTA light rail line stations) and to other major local destinations; and ▪ onsite bicycle use incentives, including secure bike storage facilities. The above mitigation measures, in combination with the roadway improvement and traffic congestion reduction mitigations identified in chapter 14 (Transportation and Circulation) of this EIR, would serve to reduce project-related traffic congestion and associated air emissions impacts, but the level of reduction would fall short of the emissions reduction needed to reduce the project's cumulative air emissions impact contribution to a less-than-significant level. The project contribution to a cumulative regional emissions impact would therefore remain ***significant and unavoidable.***		
Impact 5-3: Project Climate Change Impact. The project would represent urban infill growth near established transit, pedestrian and bicycle systems. Nevertheless, assuming "business as usual" greenhouse gas emission characteristics, the project would increase carbon dioxide and other greenhouse gas (GHG) emissions relative to existing conditions by facilitating office and general commercial building construction, and by increasing employment, shopping and support activity in the area and related vehicle miles traveled associated with the movement of people and goods to and from the project sites. GHG emissions from the project would include long-term emissions associated with the added	S	**Mitigation 5-3.** Incorporate the following or similar GHG reduction measures in project design and construction phases: ▪ adoption of a project design objective to achieve Leadership in Energy and Environmental Design (LEED) New Construction "Silver" Certification or better, in addition to required compliance with California Code of Regulations Title 24 Energy Efficient Standards; ▪ emphasis on use of recycled and local origin construction materials; ▪ construction and demolition waste	Applicant	SU

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project vehicle trips and electricity use and natural gas combustion to operate the added office and commercial buildings, and short-term emissions associated with project construction materials production and construction activity. These substantial added GHG emissions effects could conflict with the State-adopted goal of reducing state GHG emissions to 1990 levels by 2020, and therefore represent a ***potentially significant project and cumulative impact.***

recycling,

- measures to encourage walking, bicycling and the use of public transit systems,
- planting of trees and vegetation near structures to shade buildings and reduce energy requirements for heating and cooling,
- use of energy-efficient light bulbs and other electrical equipment,
- incorporation of onsite renewable energy production (e.g., photovoltaic cells or other solar options),
- promotion of commute trip reduction plans (for high employment tenants), and
- tenant incentives to increase recycling and reduce generation of solid waste.

Project implementation of these and/or similar mitigation measures would assist in reducing identified project-related GHG emissions impacts. Nevertheless, the percentage of GHG reduction associated with these measures is not reasonably quantifiable and cannot be assumed to fully mitigate project GHG emissions impacts; therefore, the project would result in a ***significant unavoidable project and cumulative climate change (GHG emissions) impact***.

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BIOLOGICAL RESOURCES

Impact 6-1: Potential Project Impacts on Burrowing Owl. The project would provide for development of lands that include potentially suitable habitat for the Burrowing Owl. No Burrowing Owls have been detected on any of the three project sites during four previous reconnaissance surveys of the McCarthy Ranch Master Plan area. Based on the results of two of these previous surveys, the City-certified 1996 McCarthy Ranch General Plan Amendment EIR and City-certified 1999 McCarthy Ranch General Plan Amendment SEIR, which both addressed proposed development of the approximately 203-acre McCarthy Ranch Master Plan area (including the three project sites), concluded that Burrowing Owls do not occupy the area. However, because the project site may occasionally include rodent burrows (gopher and squirrel burrows have been previously found), some individuals of Burrowing Owl populations in the region are migratory, and Burrowing Owls have been known to occupy disked land, the owl could occupy one or more of the three sites now or in the future. The Burrowing Owl is a federal "species of concern" and a state "species of special concern," and is protected under the federal Migratory Bird Treaty Act and state Fish and Game Code (CDFG Code Sections 3503, 3503.5 and 3800). Possible impacts of the project on the Burrowing Owl include loss of foraging and nesting habitat and possible death of nesting and young birds, representing a "take" under	S	**Mitigation 6-1.** The CDFG defines the migratory bird breeding season as February 1 through August 31. If it is not possible to schedule project demolition and construction activities between September 1 and January 31, *pre-construction surveys of the project site for nesting birds* shall be completed by a qualified biologist or ornithologist, following current CDFG survey protocol, to ensure that no Burrowing Owl nests will be disturbed during project implementation. The pre-construction surveys shall be completed no more than 14 days prior to the initiation of demolition or construction during the early part of the breeding season (February through April) and no more than 30 days prior to initiation of these activities during the late part of the breeding season (May through August) to assure "take" avoidance. During this survey, the biologist or ornithologist shall also observe burrows and other possible Burrowing Owl nesting habitats immediately adjacent to the construction areas for nests. The pre-construction survey report must be submitted to CDFG for review and approval. Verification that the CDFG has determined that the pre-construction surveys are adequate must be provided to the City. If an active nest is found sufficiently close to the activity areas to be disturbed by the activity, the biologist or ornithologist, in consultation with the CDFG, shall implement the following additional or similar protection measures, subject to CDFG approvals:	Applicant	LS

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the federal Migratory Bird Treaty Act and a ***potentially significant impact.***

- No Burrowing Owls shall be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted as a means to avoid take, pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction.

- A protected area 250 feet in radius, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls or individual resident owls. This protected area will remain in effect between February 1 and August 31, or at the CDFG discretion and based upon monitoring evidence, until any young owls are foraging independently. In the non-nesting season, a protected area 165 feet in radius, within which no new construction activity will be permissible, will be maintained between project activities and burrows occupied by Burrowing Owls. Any development within these protected areas would be approved beforehand by the CDFG.

Written verification that the CDFG has approved the above or a similar mitigation approach shall be submitted to the City before a demolition or grading permit will be issued.

Implementation of this measure will reduce this impact to a ***less-than-significant level***.

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Impact 6-2: Potential Project Impacts on Nesting Raptors. The project would provide for development activity (building demolition, site grading and building construction) adjacent to the Coyote Creek riparian corridor. The riparian corridor may be utilized by nesting or foraging raptors protected under the provisions of the federal Migratory Bird Treaty Act and CDFG Code sections 3503, 3503.5 and 3800. The proposed project would not directly impact the riparian corridor. To implement creek corridor mitigation recommendations identified in the 1996 McCarthy Ranch General Plan Amendment EIR, the applicant sold a 6-acre strip of land between the proposed project sites and the Creek Corridor to the City of San Jose for use in creating the existing Coyote Creek open space buffer. Nevertheless, project demolition or construction activity near riparian corridor raptor nests could result in indirect disturbance, including incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, which would be considered a "take" under the CDFG code, and therefore represents a ***potentially significant project impact.***	S	**Mitigation 6-2.** Implement Mitigation 6-1. During the Mitigation 6-1 survey, the biologist or ornithologist shall also observe all trees and other possible nesting habitats immediately adjacent to the construction areas for raptor nests. If an active raptor nest is observed sufficiently close to the work areas to be disturbed by demolition or construction activities, the biologist or ornithologist, in consultation with the CDFG, shall determine the extent of necessary construction-free buffer zone to be established around the adjacent raptor nest, typically 250 feet, to ensure that raptor nests will not be disturbed during project construction. No construction activity shall be permissible within the buffer zone during the nesting season (February 1 through August 31). As stipulated in the 1999 SEIR, written verification that CDFG has approved this mitigation plan must be submitted to the City before a demolition or grading permit will be issued. Implementation of this measure would reduce this impact to a ***less-than-significant level***.	Applicant	LS
Impact 6-3: Loss of Ordinance-Sized Trees. Project site A includes four trees adjacent to the largest packing shed, and all three sites include existing street trees along their North McCarthy Boulevard frontages. One or more of these trees may meet the City of Milpitas Tree Ordinance definition of an "ordinance-size" tree--i.e., 37 inches or greater in circumference at a height of four and one-half	S	**Mitigation 6-3.** No ordinance-sized tree shall be removed from any of the three project sites without a City-issued tree removal permit. Pursuant to the City of Milpitas Municipal Code Tree Ordinance, any ordinance-sized tree to be removed from one of the three project sites shall be replaced at a 3:1 ratio within the project site. The City shall approve or determine the species of the replacement	City and applicant	LS

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feet above ground level. Therefore, implementation of the project could result in the loss of one or more ordinance-sized trees, which would represent a ***significant impact.***		trees. Implementation of this measure would reduce this impact to a ***less-than-significant level***.	
CULTURAL AND HISTORIC RESOURCES			
Impact 7-1: Project-Related Potential for Disturbance of Archaeological Resources. The proposed project would provide for future development of the three project sites with office and community shopping center uses. Such development activity, including grading/excavation for foundations and infrastructure, could disturb as yet unidentified sensitive, on-site, subsurface archaeological resources. This possibility represents a ***potentially significant impact.***	S	**Mitigation 7-1.** Require that a qualified archaeologist be retained at applicant expense to periodically monitor initial project-related on-site building foundation, infrastructure, and other excavation. In the event that subsurface cultural resources are encountered during approved ground-disturbing activities, work within a 160-foot radius shall be stopped, the Milpitas Director of Planning & Neighborhood Services (Director) shall be notified, and the retained archaeologist shall evaluate the finds and make appropriate recommendations. The archaeologist's recommendations could include some combination of collection, recordation, analysis and/or capping of any materials identified as significant. The archaeologist's findings shall be documented and submitted to the Director. If disturbance of a project area cultural resource cannot be avoided, a mitigation program in compliance with sections 15064.4 and 15126.4 of the CEQA Guidelines shall be implemented. In the event that any human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped until the Santa Clara	City and applicant	LS

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SU = Significant unavoidable impact
NA = Not applicable

		County Coroner has been notified and has made a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner or City shall notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most like descendants, the descendants shall make recommendations regarding proper burial, which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines. Implementation of these measures would reduce this potential impact to a ***less-than-significant level***.	
HAZARDS AND HAZARDOUS MATERIALS			
Impact 9-1: Potential for Project-Related Exposure to Onsite Hazardous Soil or Groundwater Contamination. The three project sites remain in active interim agricultural use. The majority of the site area is cultivated and irrigated for row crops. Typically and historically, such row crop management can involve the periodic application of pesticides, fertilizers and herbicides which can result in soil and/or groundwater contamination. In addition, onsite agricultural production activities (packing, transport, etc.) and associated above- and below-ground fuel storage facilities may have resulted in soil and/or groundwater contamination from leaks or spills. As a result, until project compliance with the additional investigation, remediation	S	**Mitigation 9-1:** Prior to undertaking any building demolition, utility construction or issuance of a grading permit for the project, the project applicant shall demonstrate to City satisfaction compliance with all applicable existing local and state site assessment and remediation requirements for potential soil, groundwater and/or existing physical improvement (buildings, storage tanks, etc.) contamination. These requirements include those of the City of Milpitas, Santa Clara County Department of Environmental Health, Regional Water Quality Control Board (RWQCB), and, if applicable, the California Department of Toxic Substances Control (DTSC). Demonstrated compliance with the established requirements of these local and	Applicant	LS

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NA = Not applicable

and closure requirements of the local and state agencies with hazardous materials jurisdiction in Milpitas is demonstrated to City satisfaction, it will be assumed that future site preparation (building demolition, grading, etc.) could result in the release of hazardous materials into the environment, and/or could result in a significant hazard to project construction workers and the public, representing a ***potentially significant impact.***		state agencies would provide adequate assurance that this identified potential for a project-related health and safety impact would be reduced to a ***less-than-significant level***.		
HYDROLOGY AND WATER QUALITY				
Impact 10-1: Project Temporary (Construction Period) Water Quality Impacts. Future project construction activities, including excavation and grading, would increase the potential for erosion and sedimentation until paving and planting are completed. Construction activities could therefore result in temporary increases in erosion which could cause the degradation of water quality within Coyote Creek and San Francisco Bay, representing a ***potentially significant impact***. Once construction is complete and all disturbed soil surfaces have been planted, erosion from the site and associated sedimentation entering Coyote Creek would be minimal.	S	**Mitigation 10-1:** In accordance with City Stormwater C.3 requirements and National Pollution Discharge Elimination System (NPDES) regulations, the project would be required to file a Notice of Intent with the State Water Resources Control Board (SWRCB), Division of Water Quality, prior to issuance of a grading permit. The filing would be required to include a description of erosion control and stormwater treatment measures to be implemented during (including *Start at the Source* measures) and following project construction, as well as a schedule for monitoring of performance. These measures are referred to as Best Management Practices (BMPs) for the control of point and non-point source pollutants in stormwater and would constitute the project *Stormwater Pollution Prevention Plan* (SWPPP). No grading permit would be issued by the City until a NPDES permit is issued, demonstrating that project erosion control and stormwater treatment measures, including the project	City and applicant	LS

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NA = Not applicable

		SWPPP, meet SWRCB requirements. The project would then be required to fully implement the erosion control and other water quality measures cited in the SWPPP and monitor these measures during the SWPPP-specified time period following completion of project construction. The RWQCB would be responsible for inspecting these measures, while the project sponsor would be responsible for implementing any remedial measures if the Board indicated that site stormwater quality objectives were not being met. The City Engineering Division would also be responsible for post-construction inspection of all water quality mitigation measures that would eventually become part of the maintained infrastructure of the project, including source control and water quality treatment measures. Implementation of these measures would reduce the construction-related soil erosion and sedimentation impacts to a ***less-than-significant level***.		
NOISE				
Impact 12-1: Project Compatibility with Existing and Projected Noise Environment. Based on available City data on existing and projected noise levels in the project area, it is estimated that future project office park and community shopping center occupants on the two project sites closest to I-880--i.e., sites C and D--would be exposed to exterior noise levels of up to 70 to 75 dBA CNEL by 2010. The projected future noise level of 70 to 75	S	**Mitigation 12-1.** In accordance with General Plan *Noise Element* Policy 6-I-X, project future applicant(s) shall conduct and submit a detailed analysis of noise reduction requirements and identification of associated site and architecture design noise reduction and insulation features to be included in the project design to City Planning Division satisfaction prior to City approval of detailed project site, architectural and landscape plans. Implementation of this	City and applicant	LS

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dBA CNEL would fall within the Milpitas General Plan *Noise Element* defined "Conditionally Acceptable" range, under which "New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the project design" (Milpitas General Plan *Noise Element* Table 6-1). Until such a detailed analysis of project noise reduction requirements for sites C and D is completed to City satisfaction, it is assumed that the project may result in a ***significant impact*** pertaining to projected land use/community noise environment compatibility		measure would reduce this potential impact to a ***less-than-significant level***.		
PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS				
Impact 13-1: Project-Related and Cumulative Impacts on Sewage Treatment and Transmission Capacity. The project would increase wastewater generation in the project vicinity. The project-proposed change in site C land use from industrial to commercial would likely produce a net increase in sewage generation, compared to estimates for the project area included in the City's 2004 Sewer Master Plan. Under its existing contract, the City currently has excess capacity at the San Jose/Santa Clara Water Pollution Control Plant, and the 2004 Sewer Master Plan did not identify any deficiencies or required mitigation in the project vicinity. It is therefore unlikely that the project would cause exceedances of Regional Water Quality Control Board wastewater treatment requirements, require	S	**Mitigation 13-1.** The City shall require that all new development on the project sites coordinate and cooperate with the City of Milpitas to ensure that adequate San Jose/Santa Clara Water Pollution Control Plant sewage treatment capacity is available and that maximum feasible water conservation is achieved through the project design. Implementation of this measure would reduce the project and cumulative impact on sewage treatment and transmission capacity to a ***less-than-significant level.***	City and applicant	LS

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new or expanded wastewater facilities, result in a determination that the wastewater treatment plant has inadequate capacity, or conflict with local planning provisions for wastewater service. However, because the project could generate more sewage than currently anticipated in applicable planning documents, the project's incremental contribution to sewage treatment and transmission demand is considered a ***potentially significant project and cumulative impact.***				
TRANSPORTATION AND CIRCULATION				
Impact 14-1: Project Impact on Milmont Drive/Dixon Landing Road Intersection. The intersection improvements assumed under Background Conditions would improve traffic operations at this intersection compared to the current configuration. However, with the project, the level of service would degrade from a LOS D to E and the average delay would increase from 45.0 seconds to 56.0 seconds during the AM peak hour. Based on City of Milpitas guidelines, this would constitute a ***significant impact.***	S	**Mitigation 14-1.** Reconfigure the northbound Milmont Drive approach from one left turn lane, one through lane, and one right turn lane under Background Conditions to one left turn lane, one shared through left lane, and one right turn lane. This mitigation measure would allow the intersection to operate at LOS D (47.2 seconds of delay) during the AM peak hour and LOS C (27.5 seconds of delay) during the PM peak hour. Implementation of this measure would therefore reduce the impact to a ***less-than-significant level.***	City and applicant	LS
Impact 14-2: Project Impact on Milpitas Boulevard/Calaveras Boulevard Intersection. The intersection of Milpitas Boulevard and Calaveras Boulevard would operate at LOS F (81.9 seconds of delay) under Background Conditions during the AM peak hour. Under Project Conditions, it would operate at LOS F (86.2 seconds of delay) with significant increases in critical-movement delay (7.1 seconds) and demand-to-capacity ratio	S	**Mitigation 14-2.** The 2030 Valley Transportation Plan (VTP) includes a range of highway and transit improvement projects to ease existing and future traffic congestion along major travel corridors in Santa Clara County. The widening of Calaveras Boulevard, between Milpitas Boulevard and I-880, is a high priority project and at least 80 percent of the funding for this improvement has been secured. The widening of Calaveras Boulevard	City and applicant	LS

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(V/C). Based on the CMP guidelines, this would constitute a ***significant impact.***		at Milpitas Boulevard would result in converting the westbound right turn lane into a shared through/right turn lane. This mitigation measure would provide a third westbound through lane at this intersections and would improve the intersection operations from a LOS F (86.2 seconds of delay) to a LOS D (51.1 seconds of delay). Since the intersection would already operate at unacceptable traffic conditions under background conditions, the project shall pay a fair share contribution towards the cost of implementing this improvement. Implementation of this measure would reduce the impact to a ***less-than-significant level***.	
Impact 14-3: Project Impact on McCarthy Boulevard/Alder Drive Intersection. The intersection of McCarthy Boulevard and Alder Drive would operate at LOS E (57.2 seconds of delay) under Background Conditions during the PM peak hour. Under Project Conditions, it would operate at LOS F (85.0 seconds of delay) with significant increases in critical-movement delay (44.0 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a ***significant impact.***	S	**Mitigation 14-3.** The new office development that has been approved for construction on the currently vacant parcel on the west side of the McCarthy Boulevard/Alder Drive intersection will add a fourth leg to this intersection to provide access to the site. Access to this new development will be via an exclusive northbound left-turn lane on McCarthy Boulevard and a westbound through lane on Alder Drive. Southbound traffic to this site would use the existing through lanes which will be converted to a shared through and right turn lane. After completion of these intersection improvements, this intersection will be built out. Under Background Conditions, this intersection would operate at unacceptable LOS during the PM peak-hour. The poor level of service is mainly attributable to the high southbound-to-eastbound left turn volumes. The intersection only provides one southbound left turn lane	NA	SU

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NA = Not applicable

		which is inadequate to accommodate future traffic volumes. Under Project Conditions, traffic operations at this intersection would further deteriorate to a level of service F during the PM peak-hour. Due to right-of-way constraints, adding a second southbound left-turn lane would not be feasible. Therefore, the project traffic impact at this intersection is considered ***significant and unavoidable***.		
Impact 14-4: Project Impact on McCarthy Boulevard/Tasman Drive Intersection. The intersection of McCarthy Boulevard and Tasman Drive would operate at LOS E (79.2 seconds of delay) under Background Conditions during the AM peak hour. Under Project Conditions, it would operate at LOS F (82.1 seconds of delay) with significant increases in critical-movement delay (4.9 seconds) and volume-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a ***significant impact.***	S	**Mitigation 14-4.** The poor LOS at this intersection is primarily caused by the very high southbound right turn volumes during the AM peak-hour using a shared through-right turn lane. To mitigate this impact, convert the southbound shared through-right turn lane into a dedicated right turn lane. Implementation of this mitigation would return the LOS to D (50.4 seconds of delay) during the AM peak hour. Implementation of this measure would therefore reduce the impact to a ***less-than-significant level***.	City and applicant	LS
Impact 14-5: Project Impact on Alder Drive/Tasman Drive Intersection. The intersection of Alder Drive and Tasman Drive would operate at LOS F (87.3 seconds of delay) under Background Conditions during the PM peak hour. Under Project Conditions, it would operate at LOS F (113.8 seconds of delay) with significant increases in critical-movement delay (34.0 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a ***significant impact.***	S	**Mitigation 14-5.** The poor LOS at this intersection is primarily caused by the very high southbound to eastbound left turn volumes during the PM peak-hour. Under Background Conditions, the left turn movement at this approach would be almost 1,100 vehicles per hour. With the project, this volume would increase to approximately 1,320 vehicles per hour. To mitigate this impact, a through lane on southbound Alder Drive could be converted into a left turn-lane. This mitigation would provide a total of three southbound left turn lanes on Alder Drive. Based on the level of service calculations, the implementation of this	NA	SU

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NA = Not applicable

		mitigation would return the LOS to E during the PM peak hour. However, adding a third southbound left turn lane on Alder Drive would not result in the desired benefits and create secondary effects that would result in additional undesirable impacts. The addition of a third left turn lane would result in merging issues and an imbalance of lane utilization for vehicles attempting to access the southbound and northbound ramps at the I-880 interchange. The triple left turn would also require the removal of an existing bicycle lane on Tasman Drive, east of Alder Drive. This would result in safety issues for cyclists heading eastbound on Tasman Drive. In addition, the bus stop on the south side of Tasman Drive, just east of the intersection with Alder Drive may have to be relocated. Considering these operational issues, the project traffic impact at the Alder Drive and Tasman Drive intersection is considered ***significant and unavoidable***.		
Impact 14-6: Project Impact on Freeway Segments. The project would cause significant increases in traffic volumes (more than one percent of freeway capacity) on the following four directional freeway segments: ▪ I-880, northbound between SR 237 and Dixon Landing Road--PM peak hour, ▪ I-880, southbound between Great Mall Parkway and Montague Expressway--PM peak hour, ▪ I-880, southbound between Montague	S	**Mitigation 14-6.** Mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. Since it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements, and no comprehensive project to add through lanes has been developed by Caltrans or VTA for individual projects to contribute to, the significant impacts on the four directional freeway segments identified above are considered ***significant and unavoidable***.	NA	SU

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NA = Not applicable

Expressway and Brokaw Road--PM peak hour, and ▪ SR 237, westbound between McCarthy Boulevard and Zanker Road--AM and PM peak hours. According to the CMP guidelines these effects would constitute a ***significant impact.***				
Impact 14-7: Year 2030 Cumulative Plus Project Impacts on McCarthy Boulevard Roadway Segments. Several roadway segments of McCarthy Boulevard between Bellew Drive and Dixon Landing Road would operate at LOS F under anticipated 2030 cumulative conditions without the project-proposed land use changes during the AM and PM peak hours. With the project-proposed land use changes, these segments would continue to operate at LOS F, but with significant increases in volume-to-capacity ratios. According to the Milpitas significance criteria this would constitute a ***significant impact.***	S	**Mitigation 14-7.** Mitigation of the significant cumulative plus project impacts on these segments of McCarthy Boulevard would require roadway widening to construct additional through lanes, thereby increasing roadway capacity. Since it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements, and no comprehensive improvement program to add through lanes has been developed for individual projects to contribute to, the project contributions to significant cumulative impacts on the McCarthy Ranch roadway segments identified are considered ***significant and unavoidable***. Although the project effects on cumulative conditions along these roadway segments have been identified as significant and unavoidable, the following measure is described to ensure that future impacts are minimized to the extent feasible: the City of Milpitas shall require individual developments in the project vicinity, including the proposed project, to identify and	City	SU

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SU = Significant unavoidable impact
NA = Not applicable

		implement improvements and/or TSM programs that will ensure the best possible traffic operations given the capacity limitations of the roadway segments.

S = Significant
LS = Less than significant
SU = Significant unavoidable impact
NA = Not applicable

2.4 SUMMARY OF ALTERNATIVES

2.4.1 Identified Alternatives

To provide a basis for further understanding of the environmental effects of the proposed project and possible approaches to reducing its identified significant impacts, the CEQA Guidelines require an EIR to also "...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Pursuant to these CEQA sections, chapter 17 of this EIR identifies and evaluates six alternatives to the proposed project, five of which would feasibly attain most of the basic project objectives, but would substantially reduce some of the significant adverse environmental effects identified in chapters 4 through 15.

The six alternatives identified for evaluation are listed below. Comparative land use breakdowns are summarized in Table 2.2.

- ***Alternative 1: No Project ("No Build" Scenario).*** As required by the CEQA Guidelines section 15126.6[e][1], this alternative assumes that the project would not occur, i.e., the three project sites would remain in their present condition.

- ***Alternative 2: Buildout Under "MP" and "C2" Zoning (Office Park and Community Shopping Center Uses) as Proposed--But with Reduced Maximum F.A.R.*** This alternative assumes development of the three project sites similar to the proposed project, with office park uses on sites A and B and a community shopping center use on site C, but with a reduced maximum FAR for the office park uses of 0.35 instead of 0.50. The maximum development size under this alternative would total approximately 750,100 square feet of office park floor area (versus 1,071,470 square feet for the proposed project) and 93,580 square feet of community shopping center floor area (the same as the proposed project).

- ***Alternative 3: Buildout Under Current "MP" Zoning--All Research and Development at Maximum Zoning Ordinance Permitted F.A.R. (0.50).*** Consistent with current Milpitas General Plan and zoning designations, this alternative assumes development of all three sites, totaling 58.54 acres, with research and development uses at the Milpitas Zoning Ordinance[1] permitted maximum F.A.R. of 0.50. The maximum research and development floor area currently permitted on the three sites, assuming a F.A.R. of 0.50, totals approximately 1,274,900 square feet.

- ***Alternative 4: Buildout Under Current "MP" Zoning--All Research and Development at Reduced F.A.R. (0.35).*** The 1997 settlement agreement between the City of Milpitas, City of San Jose, Santa Clara Audubon Society, et al., permits development of the McCarthy Ranch Master Plan Area, including the three project sites, in non-residential use (Industrial Park and Manufacturing) and establishes that the litigants would not object to such development up to a maximum F.A.R. of 0.35. Accordingly, this alternative assumes development of all three sites with research and development uses at a maximum F.A.R. of

[1]Milpitas Municipal Code Title XI--Zoning, Planning and Annexation, Chapter 10--Zoning, section XI-10-35.05-5.1--"MP" Industrial Park District, Development Standards, Floor Area Ratios.

0.35. The maximum research and development floor area for the three sites under this limitation totals approximately 843,680 square feet.

- ***Alternative 5: Building Under Current "MP" Zoning--All Corporate Headquarters at Maximum Zoning Ordinance Permitted F.A.R. of 0.50.*** This alternative assumes development of all three sites with corporate headquarters uses at the Milpitas Zoning Ordinance permitted maximum F.A.R. of 0.50, in the event that a response to a potential stronger market for additional corporate office rather than research and development floor space materializes at the project location. Corporate headquarters office space typically generates less daily and peak period vehicular traffic than does research and development floor space.[1] The maximum development size under this alternative would total approximately 1,274,900 square feet of corporate headquarters floor area.

- ***Alternative 6: Buildout with Mixed Use--Corporate Headquarters (0.50 FAR), Office Park (0.50 FAR) and Community Shopping (0.23 FAR).*** This alternative assumes development of the southern half of project site A as corporate headquarters at an F.A.R. of 0.50, the northern half of site A and all of site B as office park at an F.A.R. of 0.50, and all of site C as community shopping center at an F.A.R. of 0.23. These three uses typically generate less daily and peak period vehicular traffic than does research and development floor space. The maximum development size under this alternative would total approximately 481,340 square feet of corporate headquarters floor area, 590,240 square feet of office park floor area, and 93,580 square feet of community shopping center floor area.

2.4.2 Conclusions: Environmentally Superior Alternative

Chapter 17 of this EIR includes a discussion of the comparative impacts of the identified alternatives. The CEQA Guidelines stipulate, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Based on the comparative evaluation in chapter 17, it has been determined that other than Alternative 1, the "no project" alternative, ***Alternative 4: Buildout Under "MP" Zoning--All R&D at Reduced F.A.R. (0.35)***, would result in the least adverse combination of net additional environmental impacts (in comparison to the proposed project), and therefore would be the "environmentally superior" alternative. Alternative 4 would nevertheless result in its own significant adverse air quality, climate change, biological resources, cultural resources, hazards and hazardous materials, noise, and transportation and circulation impacts.

[1]Daily AM and PM peak hour trip generation rates per square foot of floor area applied by the City of Milpitas for traffic analysis purposes are less for corporate headquarters space in comparison to research and development space.

Table 2.2
SUMMARY COMPARISON: PROJECT VS. ALTERNATIVES

	Site A	Site B	Site C	Total
Site size (approx.)	44.20 acres	5.00 acres	9.34 acres	58.54 acres
Existing General Plan designation	Industrial Park and Manufacturing	Industrial Park and Manufacturing	Industrial Park and Manufacturing	
Existing zoning	MP (Industrial Park)	MP (Industrial Park)	MP (Industrial Park)	
Maximum F.A.R.	0.50	0.50	0.50	
Proposed Project:				
General Plan designation	No change	No change	General Commercial	
Zoning	No change	No change	C2 (General Commercial)	
Land use	Office park	Office park	Community shopping center	
F.A.R.	0.50	0.5	0.23	
Maximum floor area (approx.)	962,570 sq. ft.	108,900 sq. ft.	93,580 sq. ft.	1,165,050 sq. ft.
Alternative 2:				
General Plan designation	No change	No change	General Commercial	
Zoning	No change	No change	C2 (General Commercial)	
Land use	Office park	Office park	Community shopping center	
F.A.R.	0.35	0.35	0.23	
Maximum floor area (approx.)	673,870 sq. ft.	76,230 sq. ft.	93,580 sq. ft.	843,680 sq. ft.
Alternative 3:				
General Plan designation	No change	No change	No change	
Zoning	No change	No change	No change	
Land use	Research and development	Research and development	Research and development	
F.A.R.	0.50	0.50	0.50	
Maximum floor area (approx.)	962,570 sq. ft.	108,900 sq. ft.	203,430 sq. ft.	1,274,900 sq. ft.

Table 2.2 (continued)
SUMMARY COMPARISON: PROJECT VS. ALTERNATIVES

	Site A	Site B	Site C	Total
Alternative 4:				
General Plan designation	No change	No change	No change	
Zoning	No change	No change	No change	
Land use	Research and development	Research and development	Research and development	
F.A.R.	0.35	0.35	0.35	
Maximum floor area (approx.)	673,870 sq. ft.	76,230 sq. ft.	142,400 sq. ft.	892,500 sq. ft.
Alternative 5:				
General Plan designation	No change	No change	No change	
Zoning	No change	No change	No change	
Land use	Corporate headquarters	Corporate headquarters	Corporate headquarters	
F.A.R.	0.50	0.50	0.50	
Maximum floor area (approx.)	962,570 sq. ft.	108,900 sq. ft.	203,430 sq. ft.	1,274,900 sq. ft.
Alternative 6:				
General Plan designation	No change	No change	General Commercial	
Zoning	No change	No change	C2 (General Commercial)	
Land use	Half of site corporate headquarters; half of site office park	Office park	Community shopping center	
F.A.R.	0.50	0.50	0.23	
Maximum floor area (approx.)	481,340 sq. ft. 481,340 sq. ft.	108,900 sq. ft.	93,580 sq. ft.	1,165,160 sq. ft.

SOURCE: Wagstaff and Associates, December 2008.

3. PROJECT DESCRIPTION

This chapter describes the proposed action or "project" addressed by this EIR. The description is based on information provided to the City by the project applicant, McCarthy Ranch LP. As stipulated by the CEQA Guidelines, the project description that follows has been detailed to the extent needed for adequate review and evaluation of environmental impacts and includes: (a) the project setting (location, boundaries, and local setting of the project site); (b) the project background (site and vicinity history); (c) a statement of the basic project objectives sought by the applicant; (d) the project's anticipated physical and operational characteristics (i.e., permitted and anticipated land uses, maximum floor area ratios, anticipated building coverage, maximum building heights, anticipated building types, anticipated access and parking provisions, anticipated drainage and infrastructure provisions, and other anticipated features); (e) anticipated project buildout timing; and (f) the various requested and anticipated jurisdictional approvals and permits required to allow implementation of the project.

3.1 PROJECT SETTING

3.1.1 Regional Location

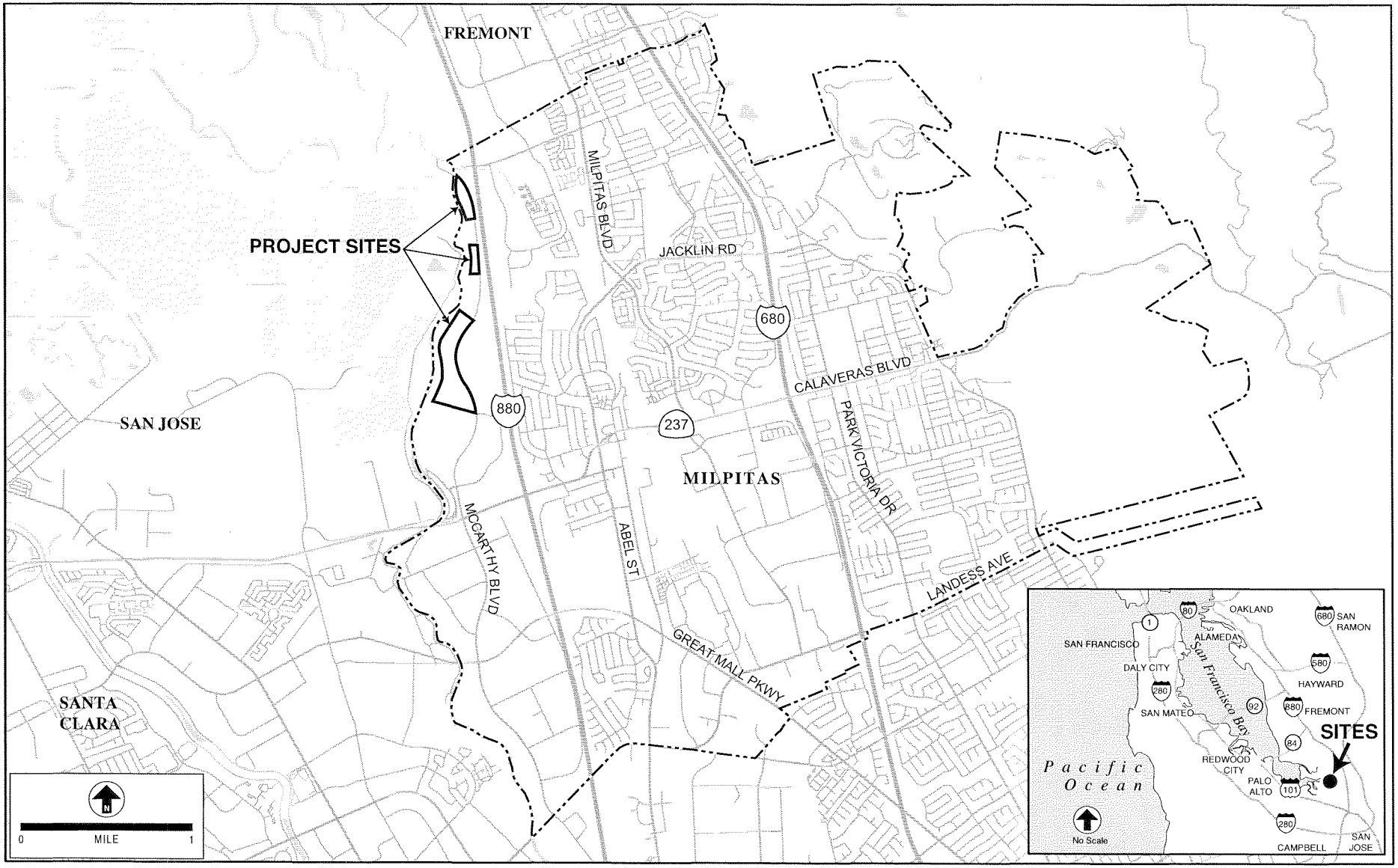
As illustrated on Figure 3.1 (Project Location), the project sites are located on the west edge of the City of Milpitas, in northern Santa Clara County. Regional freeway and highway access to the site and vicinity is provided by Interstate 880 (I-880) and State Route 237 (SR 237/Calaveras Boulevard). Adjacent and nearby cities include Fremont, Newark and Union City to the north, San Jose to the west and south, and Santa Clara, Mountain View and Palo Alto to the southwest, west and northwest, respectively.

3.1.2 Local Setting

As shown on Figures 3.1 and 3.2 (Local Map), the three non-contiguous project sites are located in a developing area along the west side of North McCarthy Boulevard between SR 237/Calaveras Boulevard and Dixon Landing Road. The west edge of each site is contiguous to the existing Coyote Creek corridor. The North McCarthy Boulevard roadway segment between SR 237 and Dixon Landing Road is approximately 2.17 miles in length. The North McCarthy Boulevard frontages of the three project sites total approximately 1.09 miles (.32, .15 and .62 miles, respectively), or approximately half of the length of the segment's west side frontage.

The three project sites are within the original McCarthy Ranch property, owned by the McCarthy Ranch family of Milpitas for over 100 years.

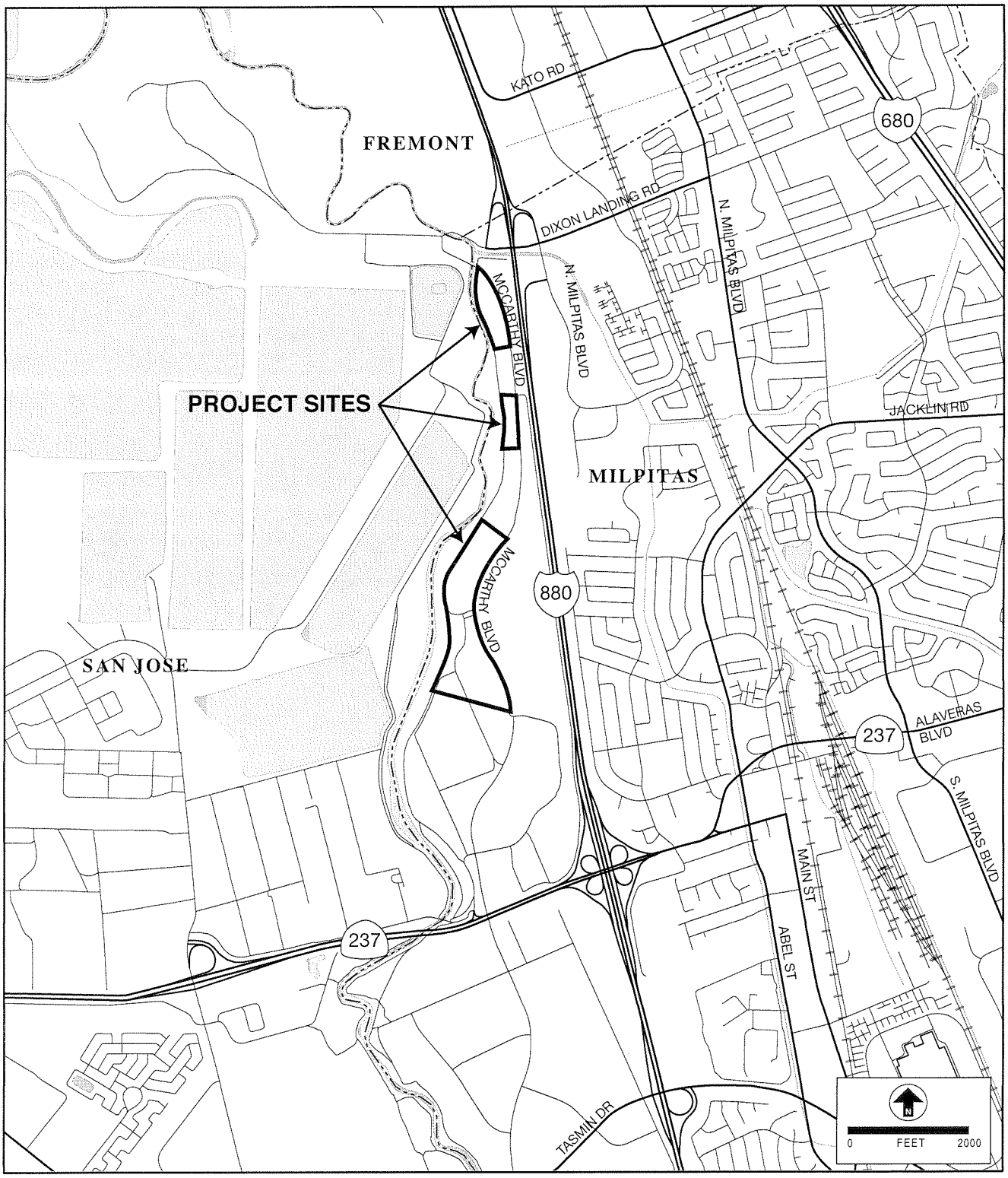
The three project sites are located within the City-adopted, approximately 203-acre, McCarthy Ranch Master Plan area. The City of Milpitas General Plan and McCarthy Ranch Master Plan provide for development of the area with a mix of commercial, residential, research and development (R&D) and industrial park uses.



SOURCE: Wagstaff and Associates

Figure 3.1

PROJECT LOCATION



SOURCE: Wagstaff and Associates

Figure 3.2

PROJECT LOCATION

Approximately 60 percent of the approximately 203-acre Master Plan area has been built out. The three project sites represent three of five remaining undeveloped sites within the 226-acre Master Plan area.

Regional and local access to the three project sites is directly provided by North McCarthy Boulevard via the SR 237/Calaveras Boulevard/I-880 interchange immediately to the south and the Dixon Landing Road/I-880 interchange directly to the north.

The 65-acre site of the Campus at McCarthy Ranch (Equity Office Campus) research and development/office complex is located on the west side of the Boulevard adjacent to the south boundary of project site A (location 2 on Figure 3.3), which currently includes three existing two- and three-story research and development (R&D) and office buildings totaling approximately 496,500 square feet in floor area, plus an existing large surface parking area. This adjacent property is also currently the subject of a pending proposal to retain these existing uses and construct six new industrial/office buildings totaling approximately 946,350 square feet, for a total of approximately 1.44 million square feet.

The vacant approximately 10-acre Macronix property is also located on the west side of the Boulevard between project sites A and B, and the City-owned Milpitas Sanitary Sewer Pump facility occupies the approximately 7-acre property between project sites B and C (location 5 on Figure 3.3).

Existing development along the opposite, east side of this North McCarthy Boulevard segment includes the approximately 82-acre McCarthy Ranch Master Plan shopping center development (location 2 on Figure 3.3), and the approximately 68-acre Irvine Business Park office, R&D, and light industrial campus (location 3 on Figure 3.3).

Coyote Creek and the Santa Clara Valley Water District-owned Coyote Creek open space and flood control corridor are located along the entire west boundary of the three project sites, separated from the three properties by an earthen levee ranging in height from 6 to 10 feet. Extensive sludge lagoons and drying beds associated with the Santa Clara-San Jose Water Pollution Control Plant (WPCP), additional cultivated agricultural areas, and a PG&E natural gas line terminal and electrical substation facility are located west of the levee.

3.1.3 Project Site Characteristics

The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres.

Like all of the McCarthy Ranch Master Plan area, the three sites are characterized by generally flat, valley floor topography and are generally void of natural vegetation due to past and remaining agricultural activities.

Site A is approximately 44.20 acres in size and remains in interim agricultural use, with most still actively cultivated for row crops. A McCarthy Ranch agricultural produce storage and packing facility remains in the center of site A, including approximately a dozen single-story buildings of various types and sizes--i.e., barns, produce storage and packing sheds, warehousing, seasonal worker housing, accessory storage tanks, equipment storage yards and parking area.

PROJECT SITE

A	South Parcel	44.20 acres
B	Middle Parcel	5.00 acres
C	North Parcel	9.34 acres
TOTAL		58.54 acres

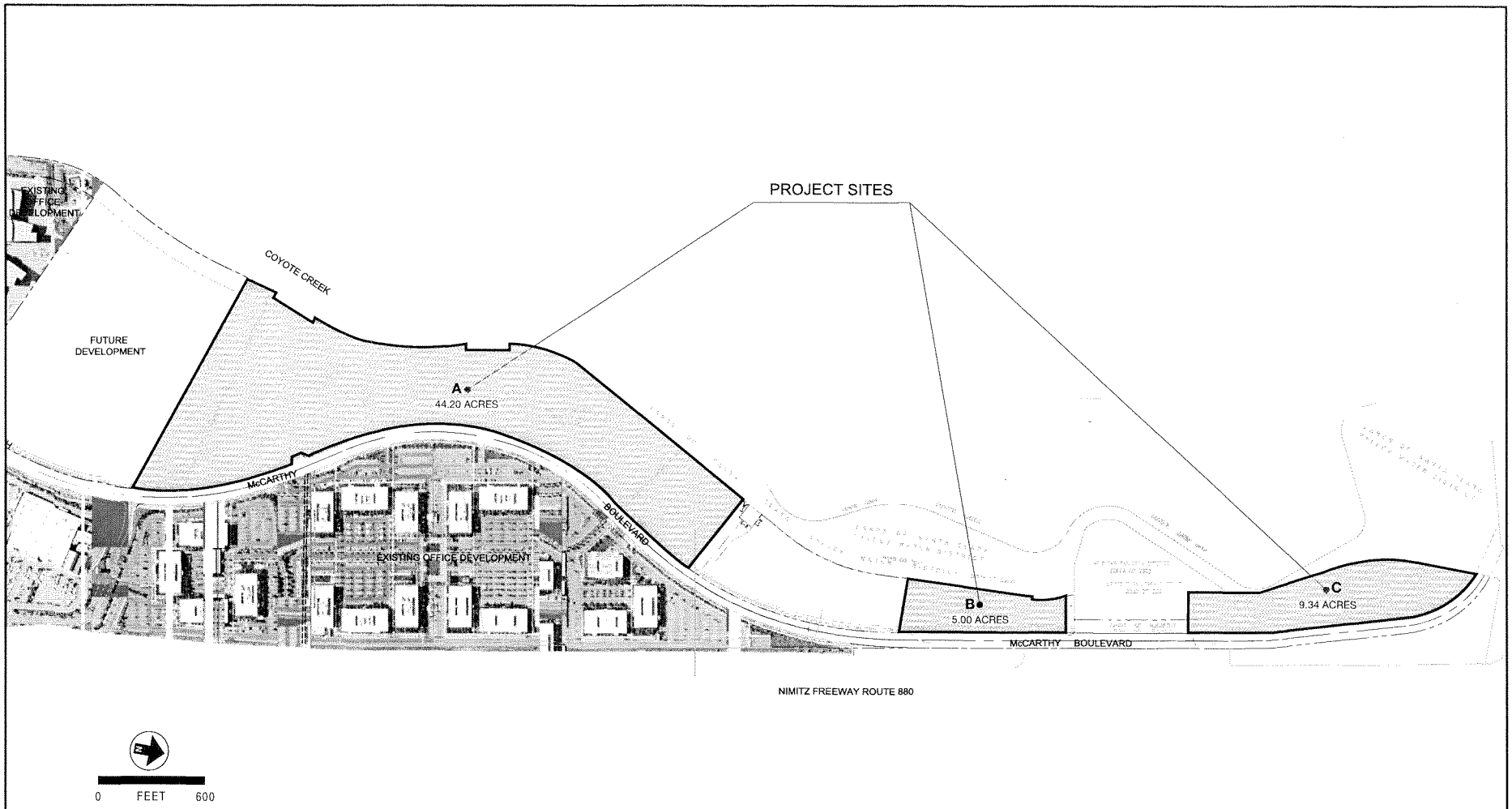
ADJACENT USES

1 Campus at McCarthy Ranch Project (industrial/office)
2 McCarthy Ranch Marketplace (commercial)
3 Irvine Business Park
4 Macronix site (Industrial Park zoning)
5 City Sewer Lift Station
6 Bayside Market Place Project (commercial)
7 Fremont Tech Center Phase 2 Project (R&D/industrial)
8 Fremont Tech Center Phase 1 Project (industrial)
9 PG&E Natural Gas Terminal and Electrical Substation
10 San Jose/Santa Clara Water Pollution Control Plant
11 Sludge Drying Beds
12 Sludge Storage Lagoons
13 Newby Island Landfill

SOURCE: Wagstaff and Associates

Figure 3.3

LAND USES IN THE PROJECT VICINITY



SOURCE: McCarthy Ranch LP

Figure 3.4

PROJECT SITES

Sites B and C are approximately 5.00 and 9.34 acres in size, respectively, and also remain in interim agricultural use, including areas cultivated for row crops. No structures exist on sites B or C.

The three properties are currently designated *Industrial Park and Manufacturing* on the Milpitas General Plan Land Use Map and zoned *Industrial Park* (MP) with a maximum floor area ratio (FAR) of 0.50.

3.2 PROJECT BACKGROUND

3.2.1 Prior to 1986

The three project sites are within the original McCarthy Ranch property, owned by the McCarthy Ranch family of Milpitas for over 100 years. Prior to 1985, the Ranch areas, including lands south of SR 237 and west of Coyote Creek, were generally in agricultural use, including cultivated row crops. The approximately 421-acre portion of the Ranch property bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road has been designated by the City of Milpitas for urban use ("Urban Reserve Area") since the early 1960s and since the early 1970s, for a mixture of industrial park and manufacturing uses.[1]

3.2.2 1986 Approval

In 1986, in response to an application from McCarthy Ranch, the City annexed the approximately 421-acre portion of the McCarthy Ranch area bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road and certified an associated *Milpitas Business Park Phase III EIR* (1986 EIR) and approved an *Industrial Park and Manufacturing* General Plan designation, MP (Industrial Park) zoning designation and associated McCarthy Ranch Master Plan for development of the area, establishing a maximum permitted FAR of 0.50.

3.2.3 1993 Approval

In 1993, the McCarthy family requested and the City approved an Addendum to the 1986 EIR (1993 EIR Addendum) and approved a General Plan amendment (GPA), rezoning and tentative map for the southern portion of the 1986 annexation, permitting development of the McCarthy Ranch Marketplace project (see location 2 on Figure 3.3)

3.2.4 1997 Approval

In 1997, the City certified a new EIR (1997 EIR) and approved a GPA establishing a new Mixed Use (MX) designation and associated rezoning, updated McCarthy Ranch Master Plan and Design Guidelines submittal, and development agreement, that together specified an updated, mixed use development program for the approximately 203-acre undeveloped remainder of the McCarthy Ranch annexation area (Master Plan area), including approximately 100 acres of research and development (R&D), 75 acres of residential, 15 acres of highway commercial, and an extension of McCarthy Boulevard through the area.

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[1]City of Milpitas, *Draft Environmental Impact Report for the McCarthy Ranch General Plan Amendment*, June 28, 1996 (SCN 94073003); page 2-4.

3.2.5 1998 Settlement Agreement

The City of San Jose, Santa Clara Audubon Society and others took joint legal action to prevent development under the 1997 MX designation, arguing that it would be incompatible with adjacent conditions (i.e., the Santa Clara/San Jose Water Pollution Control Plant, Newby Island Landfill, and habitat values along Coyote Creek). A subsequent April 17, 1998 settlement agreement permitted development of the Master Plan area if it was re-designated back to non-residential use (Industrial Park and Manufacturing), and established that the City of San Jose would not object to subsequent development of non-residential uses under this re-designation provided that such development did not exceed an FAR of 0.35.

3.2.6 1999 Approval

In 1999, in response to the 1997 settlement agreement and a subsequent new application by McCarthy Ranch, the City certified a Supplemental EIR (1999 SEIR), tiered upon the 1997 EIR, and approved a GPA, rezoning and associated entitlements changing the land use designation from MX (Mixed Use) back to MP (Industrial Park) with a maximum permitted FAR of 0.50, and with an SEIR stipulation that any proposed increase in FAR beyond 0.35 "would require additional environmental review."

3.3 PROJECT OBJECTIVES

The basic objectives for the McCarthy Ranch Mixed Use Project, as derived by the EIR authors based on statements and project description materials provided by the applicant, are to:

- respond to anticipated future market demands for additional high quality office, R&D and community-serving shopping space development opportunities in southern Santa Clara County, on relatively flat land with direct freeway access and an existing urban infrastructure, by completing the final phase of the development program envisioned for the area in the City-formulated McCarthy Ranch Master Plan as adopted by the City in 1986 and amended by the City in 1999--i.e., an *Industrial Park* development program at an FAR of up to 0.50, but with modification to accommodate a *General Commercial* use of site C at an FAR of 0.23; and

- complete the additional environmental review (CEQA compliance) documentation necessary to address the environmental consequences of the project, including the proposed 0.5 FAR on sites A and B, in response to the 1998 settlement agreement which advocated a maximum FAR of 0.35 for remaining Industrial Park development phases, and as specified in the 1999 Supplemental EIR for the McCarthy Ranch General Plan Amendment (see section 3.2.6 above) which stipulated that any proposed FAR beyond 0.35 "would require additional environmental review."

3.4 PROPOSED PROJECT CHARACTERISTICS

3.4.1 Anticipated Development Program

The proposed project represents a final implementation phase of the McCarthy Ranch Master Plan along the west side of North McCarthy Boulevard.

The proposed project includes the following mix of office park and community shopping center land uses for the three project sites:

	Site A	Site B	Site C	Total
Site size (approx.)	44.20 acres	5.00 acres	9.34 acres	58.54 acres
Assessor's Parcel No.	22-29-36 (35.01 acres) and 22-30-37 (9.19 acres)	22-30-39	22-30-48	
Existing General Plan designation	Industrial Park and Manufacturing	Industrial Park and Manufacturing	Manufacturing and Warehousing	
Proposed General Plan designation	No change	No change	General Commercial	
Existing zoning	MP (Industrial Park)	MP (Industrial Park)	MP (Industrial Park)	
Proposed zoning	No change	No change	C2 (General Commercial)	
Proposed land use	Office Park	Office Park	Community Shopping Center	
Maximum and Proposed FAR	0.50/0.50	0.50/0.50	0.50/0.23	
Proposed maximum floor area (approx.)	962,570 sq.ft.	108,900 sq.ft.	93,580 sq.ft.	1,165,050 sq. ft

3.4.2 Possible Project Variation

Depending upon market conditions, the applicant may ultimately decide to retain the current MP (Industrial Park) zoning for project site C, rather than rezone site C to C2 (General Commercial). Under CEQA, an EIR is required to "...describe a range of reasonable alternatives to the proposed project"...with emphasis on alternatives that would mitigate the significant effects of the project. It has been initially determined that a project alternative that retains the current MP (Industrial Park) zoning for Site C--i.e., buildout with an office park use at an FAR of 0.50, similar to what is proposed for sites A and B--may have slightly reduced traffic and other impacts in comparison to the proposed project (rezoning of Site C to C2). The "Alternatives to the Proposed Project" chapter of the EIR will therefore include among the range of alternatives evaluated a project variation that retains the current MP (Industrial Park) zoning for site C.

3.5 REQUIRED JURISDICTIONAL APPROVALS

3.5.1 City of Milpitas Approvals

Implementation of the proposed McCarthy Ranch Mixed Use Project would require the following approvals from the City of Milpitas:

(a) CEQA Compliance: City certification of a new EIR describing the environmental consequences of development of project sites A and B with office park uses at a floor area ratio (FAR) of 0.50 (although an FAR of 0.50 on project sites A and B would be consistent with the current MP zoning of the two properties, the 1999 SEIR has indicated that a proposed FAR beyond 0.35 "would require additional environmental review").

(b) General Plan Amendment: City approval of a General Plan amendment to change the General Plan Land Use Map designation of site C from *Industrial Park and Manufacturing* to *General Commercial.*

(c) Rezoning: City approval of a rezoning to change the Zoning Ordinance designation of site C from *Industrial Park* (MP) to *General Commercial* (C2) to be consistent with the proposed General Plan change.

(d) Other Required City Approvals: Project implementation is also expected to eventually require City approval of detailed project site, architectural and landscape plans; subdivision tentative maps; parcel map; possible development agreement(s); possible Conditional Use Permit for commercial uses within the project Community Commercial Center component; a sign program; a demolition permit to clear existing agricultural structures on project site A; and grading permit(s), building permit(s), water and sewer hook-ups, and other ministerial actions.

3.5.2 Other Required Approvals and Consultations

The project is also expected to require approvals from the following trustee and other responsible agencies:

The applicant would be required to file a *Notice of Intent* and a *Storm Water Pollution Prevention Plan (SWPPP)* for approval by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in accordance with National Pollution Discharge Elimination System (NPDES) requirements.

The project would also require completion of a *Transportation Impact Analysis* (TIA) for approval by the Santa Clara Valley Transportation Authority (VTA) prior to final City action on the requested General Plan Amendment and rezoning.

4. AESTHETICS

This EIR chapter describes: (1) the local visual setting; (2) Milpitas General Plan policies and Zoning Ordinance regulations pertaining to aesthetics; (3) design guidelines and development standards and controls specifically formulated for the McCarthy Ranch Master Plan; and (4) the potential visual impacts of the project, given these applicable City policies, regulations, standards and guidelines.

In particular, the CEQA Guidelines (Appendix G) encourage Lead Agencies to consider whether a proposed project will have a substantial adverse effect on an existing scenic vista, substantially damage existing scenic resources within a state-designated scenic highway, substantially degrade the existing visual character or quality of the project site and surroundings, or create a new source of substantial light and glare which would adversely affect day or nighttime views in the area.

4.1 SETTING

4.1.1 Existing Local Visual Landscape

The three noncontiguous project sites--sites A, B and C--are located on the west edge of the City. Intensive urbanization exists immediately to the north, south and east.

The Coyote Creek levee, open space and flood control corridor adjacent to the west edge of the three sites represent the western edge and "urban boundary" of the City. In the site vicinity between Dixon Landing Road and SR 237, an intensive urban development pattern exists between the Coyote Creek levee and I-880, including the existing Campus at McCarthy Ranch industrial/office park, McCarthy Ranch Marketplace shopping center, and Irvine Business Park immediately to the south and east of the project sites.

In the project site vicinity, the flat urbanized area east of Coyote Creek is comprised of a highly developed, generally uniform urban landscape, with building heights rarely exceeding 35 feet. The three project sites are located within the approximately 203-acre McCarthy Ranch Master Plan area. Approximately 60 percent of the Master Plan area along North McCarty Boulevard has been built out with a generally uniform pattern of building heights and masses typical of contemporary light industrial, R&D, office park, and region-serving shopping developments in the south Bay Area. The visual landscape along the Boulevard is visually integrated with similar setbacks and building coverage characteristics, and well-designed street and median landscaping, pedestrian paths, lighting, and signage.

To the west of the project sites, separated from the McCarthy Ranch Master Plan area by the Coyote Creek levee and open space corridor, is an unurbanized landscape of cultivated agricultural areas, sludge lagoons and drying beds associated with the Santa Clara-San Jose Water Pollution Control Plant (WPCP), and the PG&E natural gas line terminal and electrical substation facility.

4.1.2 Project Site Visual Characteristics

The three project sites represent three of five remaining undeveloped properties within the McCarthy Ranch Master Plan area. Like all of the Master Plan area between Dixon Landing Road and SR 237, the sites are characterized by generally flat, valley floor topography, and are generally void of natural vegetation due to past and remaining agricultural activities.

Site A remains in interim agricultural use, with most of the property still actively cultivated for row crops. A cluster of small McCarthy Ranch agricultural produce storage and packing facility structures remains in the center of site A, including approximately a dozen single-story buildings of various types and sizes--i.e., barns, produce storage and packing sheds, warehousing, seasonal worker housing, accessory storage tanks, equipment storage yards and parking area. Sites B and C also remain in interim agricultural use, including areas cultivated for row crops. No structures exist on sites B or C. The existing and past cultivation of the three sites has resulted in the absence of mature vegetation. Overall, the three sites are devoid of any distinct physical or natural features.

There are views from and through the three sites of existing riparian vegetation along Coyote Creek and the approximately 6-to-10-foot high and the Coyote Creek earthen levee along the west edge of the three sites (see photos 1, 2 and 3 in chapter 11, Land Use and Planning).

The Coyote Creek Trail is located at the top of the levees. The trail is paved for pedestrian and bicycle use and is a dedicated segment of the San Francisco Bay Trail system.

4.1.3 Views of the Project Site from Surrounding Vantage Points

I-880 and SR 237 through the City are designated as "Scenic Connectors" by the Milpitas General Plan (see section 4.2, Pertinent Plans, Policies and Regulations, herein). Portions of project sites C, B and the northern tip of A are partially visible from the southbound segment of I-880 through the existing street tree canopy along North McCarthy Boulevard. Views northward toward the sites from SR 237 are largely blocked by roadside and intervening development (the McCarthy Ranch Marketplace and Campus at McCarthy Ranch) and the Coyote Creek levee and riparian corridor.

The three sites are directly visible from North McCarthy Boulevard, partially screened by existing roadside and median landscaping (see photos 1, 2 and 3 in chapter 11, Land Use and Planning).

4.1.4 Outward Views from the Project Site

The existing development along the east side of North McCarthy Boulevard, including the Irvine Business Park and McCarthy Ranch Marketplace, blocks most views from the project sites toward the west slopes of the scenic Los Buellis Hills backdrop to the east. The hills are occasionally visible through breaks in existing development on the opposite side of North McCarthy Boulevard, including a vista towards the hills at the Ranch Road intersection.

4.1.5 Existing Sources of Light and Glare

Existing sources of light and glare are abundant in the urban environment along the Milpitas segment of the I-880 corridor and along McCarthy Boulevard, including but not limited to street

lights, parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

4.2 PERTINENT PLANS AND POLICIES

Adopted Milpitas General Plan policies and zoning regulations pertinent to consideration of the proposed project and its aesthetic implications are described below:

4.2.1 Milpitas General Plan

Section 4.7 of the Milpitas General Plan, *Scenic Resources and Routes*, identifies city-identified visual concerns and associated policies pertaining to community scenic resources and scenic routes.

Designated Scenic Corridors and Connectors. The Milpitas General Plan identifies a network of designated "Scenic Corridors" and "Scenic Connectors" within and through the city. There are no designated Scenic Corridors in the project site vicinity; however the entire lengths of I-880 and SR 237 through the City are designated "Scenic Connectors."

The City's General Plan "Scenic Connectors" designations are typically located along streets connecting or providing access to the Scenic Corridors or providing distant views. Scenic views from I-880 and SR 237 include the City's Los Buellis Hills backdrop to the east. The General Plan states that "Scenic Connectors 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 roadside design treatment (landscaping, utility undergrounding, etc.) is called for to provide "visual continuity."

Major Visual Gateways. As illustrated on Figure 4.1, the Milpitas General Plan also identifies a number of community entry points as "Major Visual Gateways." One of these "gateway" designations, on SR 237 eastbound at Coyote Creek, is near the McCarthy Ranch Master Plan area and the project sites. Views towards the project sites from this "gateway" are largely obscured by the intervening riparian vegetation and levee along Coyote Creek.

4.2.2 City of Milpitas Zoning Ordinance S-Zone Requirements

In addition to the underlying MP (Industrial Park) zoning designation, the three project sites and the remainder of the McCarthy Ranch Master Plan area are within the City-designated Site and Architectural (S Zone) Overlay District. The overlay designation is intended by the City "to be a distinct district that promotes orderly, attractive and harmonious development." Development in S-Zone designated areas is subject to Site and Architectural Design review by "the review authority," which is currently the Milpitas Planning Commission, and Planning Commission approval of a Site Development Permit in accordance with Milpitas Municipal Code Section XI-10-57.03, Site Development Permit and Minor Site Development Permits.

The S Zone review applications are required to include detailed, project-specific design information including site plan, building design information, parking and access details, street improvement details, signage and exterior lighting details, landscaping details, shadow studies and other design data.

4.2.3 McCarthy Ranch Design Guidelines and Development Standards

Development within the McCarthy Ranch Master Plan area, including the three project sites, is also required to comply with the associated *McCarthy Ranch Design Guidelines and Development Standards* formulated and incorporated into the Master Plan in early 2000.[1] The document establishes design standards and guidelines that are intended to supplement City zoning controls and ensure visual unity and harmony within the Master Plan Area. The document includes standards and guidelines addressing general site planning, architectural character, open space and landscape, recommended street tree and plant list, signage and lighting.

4.3 IMPACTS AND MITIGATION MEASURES

4.3.1 Significance Criteria

Based on the CEQA Guidelines,[2] the proposed project would be considered to have a significant adverse aesthetic impact if it would:

(a) have a substantial adverse effect on a scenic vista;

(b) substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway;

(c) substantially degrade the existing visual character or quality of the site and its surroundings; or

(d) create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

In addition, the project would be considered in this EIR to have a significant adverse aesthetic impact if it would conflict with any applicable Milpitas General Plan policy or Zoning Ordinance regulation adopted for the purpose of avoiding or mitigating an adverse aesthetic effect.

4.3.4 Impacts and Mitigation Measures

Project Impacts on Scenic Vistas and Scenic Resources. Buildout of the project under applicable Milpitas General Plan policies and Milpitas Zoning Ordinance regulations would have no significant adverse impact on a scenic vista. There are no community-identified (Milpitas General Plan) important scenic vistas in the project vicinity.

There are also no Milpitas General Plan-identified scenic resources on any of the three project sites. However, the tree-lined Coyote Creek riparian corridor, which is separated from each of the three sites by the adjacent Coyote Creek levee, is identified in the General Plan as a City

[1]Ken Kay Associates et al., *McCarthy Ranch Design Guidelines and Development Standards*, Milpitas, January 24, 2000 Final Draft, prepared for the McCarthy Ranch and reviewed by the City of Milpitas staff, City Council and Planning Commission.

[2]CEQA Guidelines, Appendix G, item I.

"visual reference point" and "visually significant vegetation." The dense tree canopy along the riparian corridor provides a distinctive visual backdrop above the 6-to-10-foot creek levee behind each of the project sites (see photos 1-3 in chapter 11, Land Use and Planning). Similar to the existing Campus at McCarthy Ranch development south of site A, development of sites A, B and C would obstruct views of the riparian tree canopy from North McCarthy Boulevard. Public views of the riparian corridor from the Coyote Creek Trail along the top of the levee would remain unobstructed.

The Zoning Ordnance stated purpose of the S-Zone site plan/architectural review and Site Development Permit approval process is to ensure that site plans and buildings properly relate to their sites, surroundings and environmental setting. Any City decision-maker interest in preserving intermitted views of the Coyote Creek riparian tree canopy by maintaining occasional visual breaks between buildings could be advocated during that review process.

In general, required future development compliance with applicable Milpitas General Plan and Zoning Ordinance provisions (especially the S-Zone site plan/architectural review and Site Development Permit approval process), associated McCarthy Ranch Master Plan design guidelines, and the City's Conditional Use Permit process requirement for any proposed building height in excess of 35 feet in the MP zone, would ensure that the visual character of project site development under the proposed MP and C2 zoning designations would be visually consistent with existing and future surrounding industrial park and commercial development.

Future development of the site would not alter or obstruct views from any public open space area or from any existing or planned residential area.

Based on these factors, the project would result in a ***less-than-significant*** impact on scenic vistas and scenic resources.

Mitigation. No significant impact has been identified; no mitigation is required.

Project Impacts on Views from I-880, a City-Designated "Scenic Connector." The proposed project land uses and anticipated future building heights, mass, signage and lighting characteristics would be subject to City Zoning Ordinance-stipulated and McCarthy Ranch Master Plan design controls, and would therefore be similar to existing office, R&D and general commercial uses along McCarthy Boulevard. The proposed project buildings and landscaping would also be visually screened from I-880 by existing vegetation and urban development along the east side of McCarthy Boulevard. The project visual impact on views from I-880 would there be ***less-than-significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

Project Light and Glare Impacts. There is an existing abundance of urban activity and associated nighttime light sources and a general perception of an illuminated urban environment along the Milpitas segment of the I-880 corridor and along McCarthy Boulevard. The anticipated illuminated aspects of the project-proposed office park and community commercial uses, including illuminated signage for the general commercial component, parking lot lighting, street lighting, security lighting, vehicular headlight activity, internal building lighting (windows) and possible reflective building surfaces and windows, would be visible from surrounding

vantage points, but would not be conspicuously different from exterior lighting characteristics already existing in the surrounding office commercial, R&D and general commercial (McCarthy Ranch marketplace) development along North McCarthy Boulevard, and therefore would not be expected to result in a significant adverse exterior light or glare impact on surrounding activities. With implementation of typical lighting design measures stipulated by the City's Zoning Ordinance, Sign Ordinance, and McCarthy Ranch Master Plan design guidelines, project light and glare impacts would be ***less-than-significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

5. AIR QUALITY AND CLIMATE CHANGE

This EIR chapter describes the impacts of the proposed project on local and regional air quality and on climate change. The air quality aspects of this chapter were prepared based on the methodology and assumptions recommended by the Bay Area Air Quality Management District (BAAQMD).[1] The climate change aspects of this chapter were prepared based on the most current available guidance from the State Office of Planning and Research (OPR).[2]

The air quality sections of this chapter describe existing air quality conditions in the project area, project construction-related air emissions impacts, the potential for direct and indirect emissions impacts associated with long-term operation of the project on both the local and regional scale, and mitigation measures warranted to reduce or eliminate any identified significant air quality impacts.

The climate change sections of this chapter describe the climate change issue, assess the potential climate change impact of the project, determine the significance of the impact, and identify mitigation measures warranted to reduce climate change impacts. In the current absence of State-enacted, CEQA-published or City-adopted standard to clearly define what constitutes a "significant" climate change impact, the climate change aspects of this chapter have been formulated based on the most current available guidance from OPR.[3]

5.1 SETTING

5.1.1 Air Quality

(a) Air Basin Characteristics (Pollution Climatology). The project is located within the San Francisco Bay Air Basin, which is contiguous with the BAAQMD boundaries. Air quality in the region is controlled by meteorological conditions and the rate of pollutant emissions. Meteorological conditions such as wind speed, atmospheric stability, and mixing height all affect the atmosphere's ability to mix and disperse pollutants. The San Francisco Bay Area is considered to be one of the cleanest major metropolitan areas in the country with respect to air quality.

Milpitas lies in the northern portion of the Santa Clara Valley at the south tip of San Francisco Bay.

Winds are predominantly out of the northwest during the summer months. Winds tend to be lighter and more variable in the winter months. A southeasterly surface flow is common during

[1]Bay Area Air Quality Management District. BAAQMD CEQA Guidelines, April 1996 (revised December 1999).

[2]OPR, Technical Advisory, CEQA and Climate Change; June 19, 2008; page 6.

[3]Ibid.

the late fall and winter. During the summer, afternoon bay breezes create moderate temperatures.

Pollution potential in the Milpitas area is relatively high during summer and early fall. Ground-level ozone is the primary air pollutant of concern in Milpitas. When high pressure dominates, low-level inversions combined with low-level, light wind flow patterns can concentrate and carry pollutants from urban areas located to the north or south into the Milpitas area, where they combine with locally emitted pollutants. As a result, ozone levels reach unhealthy levels at least once per year in the area. In wintertime, the pollutant of main concern is carbon monoxide. The high level of automobile use in the area combined with stagnant late night and early morning meteorological conditions can lead to a high build up of carbon monoxide levels. The South Bay Area experiences the highest carbon monoxide levels in the entire Bay Area; however, carbon monoxide levels have not been at unhealthy levels in many years.

(b) Air Quality Standards. Both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. These criteria pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates--i.e., inhalable particulate matter--PM_{10} and $PM_{2.5}$, and lead (Pb). These are considered the most prevalent air pollutants known to be hazardous to human health.

Table 5.1 identifies the major "criteria" pollutants and their characteristics, health effects, and typical sources. Individuals vary as to their sensitivity to air pollutants, so the national and state standards have been set at levels that protect groups that are more sensitive (e.g., asthmatics). The federal and California state ambient air quality standards for criteria pollutants are summarized in Table 5.2. In general, the California state standards for criteria pollutants are more stringent than the federal standards. This is particularly true for ozone and suspended particulate matter.

In addition to the criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (such as dry cleaners). Diesel exhaust is the predominant TAC in urban air. 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.

(c) Current Ambient Air Quality Conditions. The BAAQMD monitors air quality at several locations within the San Francisco Bay Air Basin. The monitoring location closest to the project sites is the Jackson Street monitoring station in downtown San Jose. Table 5.3 summarizes exceedences of state and federal standards at the downtown San Jose monitoring site during the period 2004-2006. Table 5.3 indicates that emissions concentrations for two criteria pollutants--ozone and particulate matter (PM_{10} and $PM_{2.5}$) exceeded state or federal standards for one day or more between 2004 and 2006.

Table 5.1
MAJOR CRITERIA AIR POLLUTANTS AND HEALTH EFFECTS SUMMARY

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog.	▪ Eye Irritation. ▪ Respiratory function impairment.	The major sources of ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide (CO)	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	▪ Impairment of oxygen transport in the bloodstream. ▪ Aggravation of cardiovascular disease. ▪ Fatigue, headache, confusion, dizziness. ▪ Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide (NO_2)	Reddish-brown gas that discolors the air, formed during combustion.	▪ Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide (SO_2)	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	▪ Aggravation of chronic-obstruction lung disease (e.g., asthma, chronic bronchitis, emphysema). ▪ Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Solid and liquid particles of dust, soot, aerosols, and other matter which are small enough to remain suspended in the air for a long period of time.	▪ Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories, and unpaved roads. Also a result of photochemical processes.

SOURCE: BAAQMD.

Table 5.2
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	---	0.09 ppm
	8-Hour	0.08 ppm	0.07 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.05 ppm	0.3 ppm
	1-Hour	0.03 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	---
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	---	0.25 ppm
Particulates (PM_{10})	Annual	---	20 ug/m3
	24-Hour	150 ug/m3	50 ug/m3
Particulates ($PM_{2.5}$)	Annual	15 ug/m3	12 ug/m3
	24-Hour	35 ug/m3	--
Lead	30-Day Avg.	---	1.5 ug/m3
	3-Month Avg.	1.5 ug/m3	---

SOURCE: Wagstaff and Associates, November 2008.

ppm = parts per million
ug/m3 = micrograms per cubic meter

Table 5.3
AMBIENT AIR QUALITY STANDARD EXCEEDANCES--SAN JOSE,[1] (2004-2006)

Pollutant	Standard	Days Exceeding Standard 2004	2005	2006
Ozone	Federal 1-Hour	0	--[2]	0
Ozone	State 1-Hour	0	1	5
Ozone	Federal 1-Hour	0	0	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0
PM_{10}	Federal 24-Hour	0	0	0
PM_{10}	State 24-Hour	4	0	2
$PM_{2.5}$	Federal 24-Hour	0	0	6

SOURCE: Campus at McCarthy Ranch Draft EIR, City of Milpitas, August 2008.

[1] Measured at the CARB Jackson Street monitoring station in downtown San Jose, the closest CARB monitoring station to the project site.

[2] The Federal 1-hr ozone standard was revoked by U.S. EPA in June 2005.

Both of these criteria pollutants are considered regional pollutants because their concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region, including the project sites.

(d) Existing Pollutant Sources and Sensitive Receptors in the Project Vicinity. BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. These include residences, schools, playgrounds, child care centers, retirement homes, convalescent homes, hospitals, and medical clinics. There are no sensitive receptors adjacent to or within close proximity to the three project sites.

The major sources of TACs in the project area are I-880 and SR 237. Long term exposure to TACs, resulting in an increased cancer risk, is officially measured over the course of a 70-year lifetime exposure. Workplaces adjacent to major roadways are not measured for TAC exposure because of the limited time individuals occupy the site. The project does not propose any residential development that could be impacted by local TAC levels.

5.1.2 Climate Change

(a) Background. *Climate change* refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from a variety of causes, both natural and human induced. The term *climate change* is often used interchangeably with the term global warming. *Global warming* refers to an average increase in the temperature of the atmosphere near the Earth's surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced. In common usage, "global warming" often refers to the warming that can occur as a result of increased emissions of "greenhouse gases" from human activities.[1]

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. Since the early 1990s scientific consensus holds that the world's population is releasing GHGs faster than the earth's natural systems can absorb them. These GHGs are released as by-products of fossil fuel combustion, waste disposal, energy use, land-use changes, and other human activities.

This release of GHGs creates a blanket around the earth that allows light to pass through but traps heat at the surface preventing its escape into space. The accumulation of GHGs has been implicated as a primary global climate change causal factor. Models show that this greenhouse effect phenomenon will lead to a 2°F to 10°F temperature increase over the next 100 years. The Intergovernmental Panel on Climate Change (IPCC) warns that most of the warming observed over the last 50 years is attributable to human activities.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming.

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[1]U.S. Environmental Protection Agency (EPA) website, Climate Change, Basic Information, September 30, 2008.

Carbon dioxide (CO_2) accounts for approximately 85 percent of total human activity-generated GHG emissions. Emissions of other GHGs, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), have also increased due to human activities. Methane and nitrous oxide emissions account for almost 14 percent of total GHG emissions. Each of these gases, however, contributes to global warming at a different relative rate. Methane has a global warming potential 23 times that of carbon dioxide, while nitrous oxide is 296 times that of the same amount of carbon monoxide. To account for these differences, estimates of GHG are often described in terms of *carbon dioxide equivalents* (CO_2e).

(b) CEQA Guidance. The State Office of Planning and Research (OPR) has advised that Lead Agencies should determine whether GHGs may be generated by a proposed project, and if so, quantify or estimate the GHG emissions by type and source. Second, the Lead Agency must assess whether those emissions are individually or cumulatively significant. When assessing whether a project's effects on climate change are "cumulatively considerable" even though its GHG contribution may be individually limited, the Lead Agency must consider the impact of the project when viewed in connection with the effects of past, current, and probable future projects. Finally, if the Lead Agency determines that the GHG emissions from the project as proposed are potentially significant, it must identify and implement measures to avoid, reduce, or otherwise mitigate the impacts of those emissions.[1]

(c) Global GHG Emissions. A report of the Intergovernmental Panel on Climate Change (IPCC), an international group of scientists and representatives, predicts a global temperature increase of between two and 11.5 degrees Fahrenheit (F) (1.1 and 6.4 degrees Celsius) by the end of the 21st century under six different scenarios of emissions and carbon dioxide equivalent concentrations.[2] Sea levels are predicted to rise by 0.18 to 0.59 meters (seven to 23 inches) during this time, with an additional 3.9 to 7.8 inches possible depending upon the rate of polar ice sheets melting from increased warming. The IPCC reports that the increase in hurricane and tropical cyclone strength since 1970 can also likely be attributed to human-generated greenhouse gases.

(d) U.S. GHG Emissions. In the U.S., energy-related activities account for three-quarters of human-generated GHG, mostly in the form of carbon dioxide emissions from burning fossil fuels. More than half the energy-related emissions come from large stationary sources such as power plants, while about a third comes from transportation. Industrial processes (such as the production of cement, steel, and aluminum), agriculture, forestry, other land use, and waste management are also important U.S. sources of GHG emissions.[3]

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[1]State of California, Governor's Office of Planning and Research, *Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review* (CEQA TA), June 19, 2008; page 1.

[2]IPCC, 2007: Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.

[3]EPA, p. 2.

The latest EPA-published national inventory of U.S. GHG emissions shows that in 2005 the U.S. emitted over 7.2 billon metric tons of GHG (a million metric tons of CO_2e) is roughly equal to the annual GHG emissions of an average U.S. power plant.)

(e) State GHG Emissions. On a per-person basis, GHG emissions are lower in California than most other states; however, California is a populous state and the second largest emitter of GHGs in the U.S. and one of the largest emitters in the world.[1] Transportation is the largest source of GHG emissions in California, followed by industrial sources and electric power generation.[2] Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.[3] Secondary effects are likely to include impacts to agriculture, changes in disease vectors, changes in habitat and biodiversity, and contribution to global rise in sea level. The Sierra snow pack, an important source of water supply for the state, has shrunk 10 percent in the last 100 years. It is expected to continue to decrease by up to 25 percent by 2050. World-wide changes are causing sea levels in California coastal areas to rise--about 8 inches of increase has been recorded at the Golden Gate Bridge over the past 100 years, threatening low coastal areas with inundation and serious damage from storms.[4]

(f) City of Milpitas GHG Emissions. Fuel consumption in the transportation sector is the single biggest source of GHG emissions in urban communities. The transportation sector includes emissions from private, commercial, fleet and transit vehicles driven within the city's geographical boundaries. The residential, commercial, and industrial sector sources include emissions from electricity and natural gas used in both private and public sector buildings and facilities. To date, the City of Milpitas has not conducted a community-wide GHG emissions inventory, and has not adopted an official climate change guiding principle or policy or climate action plan.

5.2 PERTINENT PLANS AND POLICIES

Local, regional and state plans, policies and regulations pertinent to consideration of the air quality and climate change impacts of the project are described below.

5.2.1 Air Quality

(a) Regional Air Quality Plan. The federal Clean Air Act and the California Clean Air Act of 1988 require the California Air Resources Board, based on air quality monitoring data, to designate as "nonattainment areas" those portions of the state where the federal or state ambient air quality standards are not met. Due to the differences between the national and

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[1]California Legislative Analyst's Office, 2006. *Analysis of 2006-07 Budget Bill (Governor's Climate Change Initiative).*

[2]California Environmental Protection Agency. 2006. *Climate Action Team Executive Summary Climate Action Team Report to Governor Schwarzenegger and the California Legislature.*

[3]California Air Resources Board (CARB), 2006a. Climate Change website (http://www.arb.ca.gov/cc/120106workshop/intropres12106.pdf), accessed December 4, 2007.

[4]ARB Draft Scoping Plan, page 6.

state standards, the designation of nonattainment areas is different under the federal and state legislation.

Both the Federal Clean Air Act and the California Clean Air Act require that the CARB designate portions of the state where federal or state ambient air quality standards are not met as "nonattainment areas" based on air quality monitoring data. Because of the differences between the national and state standards, the designation of "nonattainment areas" is different under the federal and state legislation.

The Bay Area had until recently attained all federal standards. The Bay Area was designated by the EPA as a maintenance area for CO on June 1, 1998, indicating that the federal ambient air quality standards had been attained. However, the EPA reclassified the Bay Area from "maintenance area" to "nonattainment" for ozone based on violations of the federal standards at several locations in the air basin.

Under the California Clean Air Act, Santa Clara County is a nonattainment area for ozone and particulate matter (PM_{10} and $PM_{2.5}$). The county is either in attainment or unclassified for other pollutants.

15.2.2 Climate Change

(a) Governor's Executive Order S-3-05 (2005). According to climate scientists, California and the rest of the developed world will have to cut emissions by 80 percent from today's levels to stabilize the amount of carbon dioxide in the atmosphere and prevent the most severe effects of climate change.[1] In 2005, in recognition of this long range goal and California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of greenhouse gases (GHG) would be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.[2]

(b) AB 32 (2006). In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires the California Air Resources Board (ARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

AB 32 establishes a timetable for the ARB to adopt emission limits, rules, and regulations designed to achieve the intent of the Act. ARB met the first AB 32-established milestones in 2007 by developing a list of early actions to begin sharply reducing greenhouse gas emissions, assembling an inventory of historic emissions, and establishing the 2020 emissions limit.[3]

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[1]CARB Climate Change Scoping Plan, December 2008, page ES-2.

[2]There are a set of specified exceptions to this requirement.

[3]California Air Resources Board (CARB), *Draft Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*, September 2007.

AB 32 stipulated that the ARB must also develop a "Climate Change Scoping Plan" to lower the state's greenhouse gas emissions to meet the 2020 limit. In December 2008, the ARB approved a "Climate Change Scoping Plan" that proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, reduce dependence on oil, diversity state energy sources, and save energy. The Scoping Plan measures adopted by the ARB will be further developed over the next three years and put in place by 2012.

The Scoping Plan indicates that reducing statewide greenhouse gas emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels.

(c) SB 97 (2007). State Senate Bill 97 (Dutton), enacted in 2007, amended the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. SB 97 directs OPR to develop draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" by July 1, 2009 and directs the State Resources Agency to certify and adopt the CEQA Guidelines by January 1, 2010.

5.3 IMPACTS AND MITIGATION MEASURES

5.3.1 Significance Criteria

(a) Air Quality. Based on the CEQA Guidelines, the project would be expected to have a significant air quality impact if it would:[1]

(1) Conflict with or obstruct implementation of the applicable air quality plan;

(2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

(3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

(4) Expose sensitive receptors to substantial pollutant concentrations; or

(5) Create objectionable odors affecting a substantial number of people.

The BAAQMD CEQA Guidelines[2] provide the following more specific additional significance criteria:

(6) A project contributing to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of 9.0 parts per million (PPM) averaged over eight hours or 20.0 PPM for one hour would be considered to have a significant impact;

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[1]CEQA Guidelines, Appendix G, item III.

[2]Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996 (Revised December 1999).

(7) A project that generates criteria air pollutant emissions in excess of the BAAQMD annual or daily thresholds would be considered to have a significant air quality impact. The current thresholds are 15 tons per year or 80 pounds per day for reactive organic gases (ROG), nitrogen oxides (NOx), or PM_{10}. Any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact;

(8) Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact;

(9) Any project with the potential to expose sensitive receptors or the general public to substantial levels of toxic air contaminants would be deemed to have a significant impact; and

(10) The BAAQMD significance thresholds for *construction dust impacts* are based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emission of particulate matter ($PM_{2.5}$ and PM_{10}). If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less-than-significant. The BAAQMD has not established separate thresholds of significance for $PM_{2.5}$. For the purposes of this analysis, a project that would have a significant impact with respect to PM_{10} is assumed to also have a significant impact with respect to $PM_{2.5}$.

(b) Climate Change. Until the State Resources Agency adopts CEQA Guidelines for the mitigation of GHG emissions or the effects of GHG emissions (SB 97 requires adoption of such guidelines by January 1, 2010), neither the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance for determining climate change impacts for individual projects. This is currently left to Lead Agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. For the purposes of this EIR and following current common practice, the project would be considered to have a significant global climate change impact if it or its related growth effects would:

(1) result in a substantial additional GHG emissions contribution that would conflict with the adopted GHG emissions goal of the State as set forth in Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006--i.e., conflict with the adopted goal of reducing state GHG emissions to 1990 levels by the year 2020; or

(2) be adversely affected by a sea level rise of 2 feet or more (as indicated above, the IPCC predicts that sea levels will rise by 0.18 to 0.59 meters--7 to 23 inches--by the end of the 21st century).

5.3.2 Air Quality Impacts

Impact 5-1: Project Demolition and Construction Period Emissions. The current project application is limited to a request for a General Plan Amendment to change the General Plan Land Use Map designation of site C from *Industrial Park and Manufacturing* to *General Commercial*, and a corresponding rezoning to change the Zoning Ordinance designation of site C from *Industrial Park* (MP) to *General Commercial* (C2). Project implementation will also require subsequent City approval of more detailed project entitlements (e.g., site, architectural and landscape plans; subdivision maps; parcel map; demolition permit to clear existing agricultural structures on site A; grading permits; building permits; sewer hook-ups; etc.). Ultimately, these subsequent project approvals will lead to construction activities, including building demolition, excavation and grading operations, associated construction vehicle traffic, and wind blowing over resultant exposed earth. These project activities would generate a combination of exhaust emissions and fugitive particulate matter emissions that would temporarily and intermittently affect local air quality. These possible effects represent a ***potentially significant impact*** [see criterion (10) in subsection 5.3.1, "Significance Criteria," above].

Implementation of the proposed project would require demolition of the existing agricultural buildings on site A. In addition to the dust created during demolition, substantial dust emissions could be created as debris is loaded onto trucks for disposal. After removal of existing structures, dust from grading and other construction activity would continue to affect local air quality during construction of the project. Construction activities would generate equipment exhaust emissions and fugitive particulate matter emissions that would affect local air quality.

Various diesel-powered vehicles and equipment would be in use on the site during project demolition and construction activities. In 1998 the California Air Resources Board identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). Health risks from TACs are a function of both concentration and duration of exposure. High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) have been identified as having the highest associated risk. Unlike these heavier and more constant sources of TACs, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction related sources are mobile and transient in nature, and the bulk of the emission occurs within the project site at a substantial distance from the nearest receptors. Because of their short duration, the transient nature of associated emissions, and the distance of the nearest sensitive receptors from the three project sites, health risks from construction emissions of diesel particulate would be a less than significant.

Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-waterbase paints, thinners, some insulating materials, and caulking materials would evaporate into the atmosphere and would contribute to the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

According to the *BAAQMD CEQA Guidelines*, emissions of ozone precursors (ROG and NO_x) and carbon monoxide from construction equipment are already included in the emission inventory that is the basis for regional air quality plans, and thus are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area. Thus, the primary effects of project construction activities would be increased dust and associated locally elevated levels of particulate matter (PM_{10} and $PM_{2.5}$) downwind of construction activity, which would represent a significant impact.

Mitigation 5-1. Dust emissions from project demolition and construction activities can be greatly reduced by implementing fugitive dust control measures. The significance of construction impacts is, according to the BAAQMD Guidelines, determined by whether or not appropriate dust control measures are implemented. Implementation of the following conventional BAAQMD-recommended dust control measures would therefore be expected to reduce this impact to a ***less-than-significant level:***

(1) Demolition Period. Require implementation of the following dust control measures by contractors during demolition of existing structures:

(a) Watering shall be used to control dust generation during demolition of structures and break-up of pavement;

(b) All trucks hauling demolition debris from the site shall be covered; and

(c) Whenever possible, dust-proof chutes shall be used for loading debris onto trucks.

(2) All Construction Phases. Require implementation of the following dust control measures by construction contractors during all construction phases:

(a) Water all active construction areas at least twice daily and more often during windy periods. Active construction areas adjacent to existing land uses must be kept damp at all times, or must be treated with non-toxic stabilizers or dust palliatives;

(b) Water or cover all stockpiles of debris, soil, sand, or other materials that can be blown by the wind;

(c) Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard;

(d) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites;

(continued)

Mitigation 5-1 (continued):

(e) Sweep daily (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites;

(f) Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets;

(g) Hydroseed or apply non-toxic soil stabilizers to inactive construction areas;

(h) Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);

(i) Install sandbags or other erosion control measures to prevent silt runoff to public roadways; and

(j) Replant vegetation in disturbed areas as quickly as possible.

Project Impacts on Local Carbon Monoxide Levels. At the local level, the pollutant of greatest concern is carbon monoxide. Concentrations of carbon monoxide are greatest near intersections and roadways with congested traffic. Carbon monoxide is a problem especially in wintertime when stagnant meteorological conditions occur (i.e., very little vertical or horizontal mixing of air in the lower atmosphere).

The proposed project would generate and attract new vehicle trips (see chapter 14, Transportation and Circulation, herein). The new trips would affect concentrations of carbon monoxide along local streets. Within the regional air basin, the new trips would add to the pollution burden. However, modeling results indicate that existing and future concentrations of local carbon monoxide near worst-case intersections used by project traffic would be well within state and federal air quality standards.

Carbon monoxide concentrations under worst-case meteorological conditions have been predicted for two intersections affected by the project. Traffic projections from chapter 14, Transportation and Circulation herein, Figures 14.5 (Existing Traffic Volumes), 14.6 (Background Traffic Volumes) and 14.9 (Project Condition Traffic Volumes) were used to determine the contribution of project generated traffic to future carbon monoxide levels based on the screening guidance recommended by BAAQMD. Emission factors were interpolated from calculations derived from the EMFAC2007 model developed by the California Air Resources Board. The results of the analysis are shown in Table 5.4.

Table 5.4 indicates that existing predicted carbon monoxide concentrations near the two "worst case" intersections affected by the project are below the significance threshold. Concentrations with "Background Condition" traffic levels identified in chapter 14 would decrease by as much as 3.3 ppm below existing levels. (Carbon monoxide concentrations are projected to decrease over time due to more strict emissions standards for new cars.) Traffic from the proposed project would slightly increase concentrations above Background Conditions; however, the

predicted concentrations would still remain well below the more stringent standard.[1] Since project traffic would not cause any new violations for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be ***less than significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

Impact 5-2: Project Long-Term Regional Air Emissions Impact. Predicted regional emissions of reactive organic gases (ROG), nitrogen oxides (NO_x) and particulate matter (PM_{10}) generated by project vehicular trips exceed BAAQMD significance thresholds; therefore, the project would have a ***significant impact*** on long-term regional air quality [see criteria (2) and (7) under section 5.3.1, "Significance Criteria," above].

The project would attract and generate vehicle trips. Regional emissions of reactive organic gases (ROG), nitrogen oxides (NO_x), and particulate matter (PM_{10} and $PM_{2.5}$) associated with project vehicular trip generation have been derived from URBEMIS computer program calculations. The URBEMIS model is designed to evaluate total regional air pollutant emissions under different land use scenarios. The predicted net daily emissions increases associated with project vehicular trip generation (see Table 14.8, Project Trip Generation, in chapter 12, Transportation and Circulation, herein) are identified in Table 5.5.

The BAAQMD CEQA Guidelines have established a significance threshold of 80 pounds per day (ppd) for these common pollutants. As stated above, BAAQMD has not developed a threshold of significance for $PM_{2.5}$. For this analysis, $PM_{2.5}$ impacts would be considered significant if project emissions of PM_{10} exceed 80 pounds per day.

As shown in Table 5.5, emissions of PM_{10} (and subsequently $PM_{2.5}$) resulting from the added local and regional vehicular trips generated by the project are predicted to exceed the significance threshold established by BAAQMD. Project-generated emissions of other pollutants are predicted to be below the established state and federal standards. Because particulate matter is a regional pollutant and the South Bay has exceeded the health-based state ambient air quality standards for the last three years, the predicted substantial increase in particulate matter resulting from build-out of the proposed project would represent a *significant project and cumulative impact*.

[1]Based on the BAAQMD CEQA Guidelines, if the projected project condition carbon monoxide levels at the worst case intersections had been above the ambient air quality standard, a more refined analysis would have been conducted using the CALINE4 dispersion model and actual lane-receiver geometry.

Table 5.4
PREDICTED WORST CASE 8-HOUR CARBON MONOXIDE CONCENTRATIONS NEAR MAJOR TRAFFIC FLOW INTERSECTIONS (IN PARTS PER MILLION)

Intersection	Existing 8-Hour (2006)	Background 8-Hour (2010)	Project 8-Hour (2010)
(18) NB 880 Ramps/ Calaveras Blvd.	8.0	4.7	4.9
(19) Abel St./Calaveras Blvd.	6.8	4.4	4.5
Most Stringent Standard	9.0	9.0	9.0

SOURCE: Wagstaff and Associates, November 2008.

Note: Over time, emissions factors are reduced as older vehicles are replaced with lower-polluting, newer vehicles. Therefore, future (e.g., 2010) emissions are typically lower than "existing" emissions.

Table 5.5
PREDICTED EMISSIONS ASSOCIATED WITH PROJECT-RELATED NET INCREASE IN VEHICULAR TRIPS (IN POUNDS PER DAY)

	ROG	NO_x	PM_{10}	$PM_{2.5}$
Project-Generated Emissions	278.4	285.6	418.2	79.8
BAAQMD Significance Threshold	80.0	80.0	80.0	80.0

SOURCE: Wagstaff and Associates, November 2008.

ROG = reactive organic gases
NO_x = nitrogen oxides
PM_{10} = particulate matter, 10 microns

Mitigation 5-2. In addition to the roadway improvement and transportation demand management (TDM) mitigations identified in chapter 14 (Transportation and Circulation) of this EIR, require the project to provide the following:

- transit facilities (e.g., bus bulbs/turnouts, benches, shelters, etc.);
- project-provided or fair-share participation in adequate shuttle service to regional transit stations system (i.e., the three or four closet VTA light rail line stations) and to other major local destinations; and
- onsite bicycle use incentives, including secure bike storage facilities.

The above mitigation measures, in combination with the traffic congestion reduction mitigations identified in chapter 14 (Transportation and Circulation) of this EIR, would serve to reduce project-related traffic congestion impacts and associated air emissions, but the level of reduction would fall short of the emissions reduction needed to reduce the project's cumulative air emissions impact contribution to a less-than-significant level. The project contribution to a cumulative regional emissions impact would therefore remain ***significant and unavoidable.***

5.3.3 Climate Change Impacts

Impact 5-3: Project Climate Change Impact. The project would represent urban infill growth near established transit, pedestrian and bicycle systems. Nevertheless, assuming "business as usual" greenhouse gas emission characteristics, the project would increase carbon dioxide and other greenhouse gas (GHG) emissions relative to existing conditions by facilitating office and general commercial building construction, and by increasing employment, shopping and support activity in the area and related vehicle miles traveled associated with the movement of people and goods to and from the project sites. GHG emissions from the project would include long-term emissions associated with the added project vehicle trips and electricity use and natural gas combustion to operate the added office and commercial buildings, and short-term emissions associated with project construction materials production and construction activity. These substantial added GHG emissions effects could conflict with the State-adopted goal of reducing state GHG emissions to 1990 levels by 2020, and therefore represent a ***potentially significant project and cumulative impact*** [see criterion (b)(1) under section 5.3.1, Significance Criteria, above].

General Methodology: Given the global scope of climate change, the challenge under CEQA is to evaluate and present information on the possible impacts of a project on global warming in a way that is meaningful in the decision-making process. Under CEQA, there are two climate change impact considerations: would the project substantially contribute to the

environmental impact *or* would the project be subject to impacts from the environment associated with global climate change.

The proposed project would constitute infill growth near transit and accessible, established pedestrian and bicycle systems. Nevertheless, the project would contribute to cumulative climate change effects by directly generating a net increase in carbon dioxide and other GHG emissions from project-related demolition, construction, and long-term operation. The principal GHGs associated with such land development activity and intensification are carbon dioxide, methane, nitrous oxide, and water vapor. In addition, ozone, which is not directly emitted, but formed from other gases in the troposphere (the lowest level of the earth's atmosphere), also contributes to retention of heat.

The project would increase emissions, relative to existing conditions, by facilitating office and commercial growth, including the construction of new buildings and increasing the number of employees and shoppers within the area, thereby increasing the daily traffic trips associated with the movement of people, goods and supplies to and from the project sites. Greenhouse gas emissions from the proposed project would include associated vehicle exhaust emissions, construction emissions from construction vehicles and machinery, and emissions from the generation of electricity to operate the new office and commercial buildings. Additional unknown quantities of greenhouse gases would be indirectly emitted from the manufacture and transportation of building materials, the operation of construction equipment, and other construction related activities.

For the purposes of this EIR, the significance of project GHG emissions impacts has been determined based on consideration of estimated net additional GHG emissions from the project, and the general consistency of the project with GHG reduction strategies identified in the California Governor's Office of Planning and Research (OPR's) June 2008 Technical Advisory on CEQA and Global Climate Change[1] (see Table 5.6). For transportation, potential project-related net GHG emissions have been estimated based on comparison with the City-certified CEQA findings (2008 EIR) for the adjacent Campus at McCarthy Ranch project.[2] An estimate of possible GHG emissions from electricity use was also made based on a similar

[1]State of California Governor's Office of Planning and Research, *Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through CEQA Review*; June 19, 2008.

[2]The City-certified 2008 Campus at McCarthy EIR included an estimate of net additional GHG emissions from project-related vehicular use (mobile emissions) using the BAAQMD-recommended URBEMIS 2007 air emissions model (version 9.2) distributed by the California Air Resources Board, which is commonly used to estimate vehicle miles traveled for projects (based on vehicle trips generated) and the associated carbon monoxide emissions from the increase in vehicle miles traveled and other project land use factors (i.e., fuel combustion for on-site heating). Using these City-certified findings, a comparative McCarthy Ranch Mixed Use Project estimate was interpolated based on comparative trip generation characteristics (the Campus at McCarthy Ranch project was estimated to generate approximately 6,659 net new daily vehicular trips; the adjacent proposed McCarthy Ranch Mixed Use project is estimated to generate approximately 20,344 net new daily vehicular trips).

comparison.[1] These factors may be substantially higher than energy use rates for future project buildings meeting the State of California Energy Code (California Code of Regulations Title 24), and for LEED-certified buildings.

Vehicular Emissions: The net new daily trips from the project are estimated to be 20,344 (from Table 14.8 in chapter 14, Transportation and Circulation), and the associated net new vehicle miles traveled (VMT) total is estimated to be 162,752 miles per year. Associated net new carbon dioxide vehicle emissions would be approximately 27,240 metric tons per year.[2]

Based on generally applied average use factors per square foot for industrial/office and general commercial floor space,[3] the proposed project would result in a net increase in electricity use of approximately 19.3 million kWh/year. The generation of electricity through combustion of fossil fuels typically yields carbon dioxide as well as smaller amounts of nitrous oxide and methane.

Based on the estimated project electricity use, it is estimated that the additional development on the site would result in an increase in emissions from the site of approximately 5,837 metric tons of carbon dioxide a year, 0.642 metric tons of methane a year, and 0.354 metric tons of nitrogen oxide a year. Table 5.6 shows the computation of these GHG emissions from the proposed project.

Other Emissions: Implementation of the project would also result in unknown quantities of GHG emissions from demolition and construction activities, building materials manufacturing and transport, and other associated activities. There are currently no commonly-applied methods for quantifying the additional GHG emissions form such activities; therefore, total direct and indirect GHG emissions from the project could be greater than the totals in Table 5.7.

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[1]The City-certified 2008 Campus at McCarthy Ranch EIR included an estimate of net additional GHG emissions from project-related electricity use, using common-practice forecasting factors from the U.S. Department of Energy, Energy Information Administration Office of Integrated Analysis for estimating electricity use based on net additional building square footage. Using these City-certified findings, a comparative McCarthy Ranch Mixed Use Project estimate was interpolated based on comparative floor area totals (conventional one- to three-story office park, industrial park and general commercial structures typically of similar building type in terms of normal energy use for space heating, equipment, etc.). The Campus at McCarthy Ranch project includes approximately 946,500 net additional floor area over existing (approximately 1,415,814 square feet of total development entitlements with approval of the project, minus 469,464 square feet of existing development on-site); the proposed McCarthy Ranch Mixed Use project floor area total is 1,165,050 square feet.

[2]Assumes an average trip length of approximately 8 miles.

[3]Based on an assumed typical average usage factor for industrial/office and general commercial uses of 20 kilowatt hours per square foot per year for electricity and 30 cubic feet per year for natural gas.

Table 5.6
ESTIMATED PROJECT GHG EMISSIONS FROM ELECTRICITY USE

Land Use	Floor Area (Square ft.)	Carbon Dioxide (Metric Tons/yr.)	Methane (Metric Tons/yr.)	Nitrogen Oxide (Metric Tons/yr.)
Office	1,071,470	5368	0.0590	0.0326
General Commercial	93,580	469	0.0052	0.0028
Totals	1,165,050	5,837	0.0642	0.0354

SOURCE: Wagstaff and Associates, 2008.

Mitigation 5-3. Incorporate the following or similar GHG reduction measures in project design and construction phases:

- adoption of a project design objective to achieve Leadership in Energy and Environmental Design (LEED) New Construction "Silver" Certification or better, in addition to compliance with California Code of Regulations Title 24 Energy Efficient Standards;
- emphasis on use of recycled and local origin construction materials;
- construction and demolition waste recycling,
- measures to encourage walking, bicycling and the use of public transit systems,
- planting of trees and vegetation near structures to shade buildings and reduce energy requirements for heating and cooling,
- use of energy-efficient bulbs and equipment,
- incorporation of onsite renewable energy production (e.g., photovoltaic cells or other solar options),

(continued)

Mitigation 5-3 (continued):

- promotion of commute trip reduction plans (for high employment tenants), and
- tenant incentives to increase recycling and reduce generation of solid waste.

Project implementation of these and/or similar mitigation measures would assist in reducing identified project-related GHG emissions impacts. Nevertheless, the percentage of GHG reduction associated with these measures is not reasonably quantifiable and cannot be assumed to fully mitigate project GHG emissions impacts; therefore, the project would result in a ***significant unavoidable project and cumulative climate change (GHG emissions) impact***.

5.3.4 Odor Impacts

A number of potential odor emission sources have been identified in the vicinity of the three project sites. These potential sources include: the Santa Clara/San Jose Water Pollution Control Plant (WPCP) and associated sludge drying beds and sludge lagoons, the BFI-Newby Island Landfill and the Zanker Road Landfill. Most of these land uses are shown on Figures 3.3 and 11.1 of this EIR (Land Uses in the Project Vicinity). The approximate distances between these potential odor sources and the three project sites are indicated below:

	Closest Approximate Distance:		
Local Odor Sources	Site A	Site B	Site C
Sludge drying beds	0.3	0.1	0.3
Sludge lagoons	0.4	0.3	0.3
BFI-Newby Island Landfill	1.1	0.9	0.6
Zanker Road Landfill	1.2	1.4	1.4
San Jose/Santa Clara Water Pollution Control Plant	1.2	1.4	1.5
Newby Island composting facility	1.8	1.3	1.1

For facilities such as wastewater treatment plants, sludge lagoons and sanitary landfills, the distance criteria established by the BAAQMD within which a source could have a potentially significant odor impact is one mile. Based on this general distance criterion, the WPCP sludge lagoons and drying beds in particular have been evaluated for their potential to generate objectionable odors at one or more of the three project sites.

Each of these potential sources has been previously evaluated in the 1997 EIR and 1999 SEIR for their potential to produce odor impacts on the McCarthy Ranch Master Plan area. Since those evaluations were completed, operations at the BFI-Newby Landfill and WPCP have been refined to substantially reduce related odor emissions. The BFI-Newby Island composting facility has been relocated to a location approximately 0.8 miles further west towards the Bay (was 0.3 miles from site C; now 1.1 miles from site C). The landfill also now denies acceptance

Table 5.7
PROJECT CONSISTENCY WITH APPLICABLE STATE IDENTIFIED GHG REDUCTION MEASURE EXAMPLES

GHG Reduction Measure Examples from State of California Governor's Office of Planning and Research[1]	Project Consistency
Land Use and Transportation Measures:	
The following land use and transportation measures have been excerpted from the OPR Technical Advisory list based on the relevance to project-specific development:	
▪ Encourage infill, redevelopment, and higher density development, whether in incorporated or unincorporated settings	*Consistent.* The project represents infill on a designated urban development site within the city boundaries.
▪ Apply advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.	*Potentially Consistent.* Such measures could be incorporated into future phases of project implementation, including detailed architectural, mechanical, and operational plans, development agreements, and conditional use permits,
▪ Incorporate features into project design that would accommodate frequent, reliable and convenient public transit.	*Potentially Consistent.* Such features could be incorporated into future phases of project implementation, including onsite transit accommodation features, project participation in local shuttle service connection to nearby LRT stations, etc.
▪ Limit idling time for commercial vehicles, including delivery and construction vehicles.	*Potentially Consistent.* This operational guideline could be incorporated into future project phases, including construction contracts, tenant agreements, etc.
Urban Forestry Measures:	
▪ Plant trees and vegetation near structures to shade buildings and reduce energy requirements for heating/cooling.	*Potentially Consistent.* This measure could be incorporated into future project phases (landscape design, etc.).
Energy Conservation Policies and Actions:	
▪ Incorporate on-site renewable energy production, including installation of photovoltaic cells or other solar options	*Potentially Consistent.* This measure could be incorporated into future project phases.

[1]State of California Governor's Office of Planning and Research, *Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through CEQA Review;* June 19, 2008; Attachment 3: Examples of GHG Reduction Measures.

▪ Offer government incentives to private businesses for developing buildings with energy and water efficient features and recycled materials. The incentives can include expedited plan checks and reduced permit fees.	*Potentially Consistent.* The City could adopt such a program.
Programs to Reduce VMT:	
▪ Encourage large businesses to develop commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes.	*Potentially Consistent.* The project could be required to formulate a commute trip reduction plan.
▪ Create an online ridesharing program that matches potential carpoolers immediately through email.	*Potentially Consistent.* The project could participate in such a program.

SOURCE: Wagstaff and Associates, October 2008.

of any odorous material or material that does not meet specific moisture limitation criteria. In addition, the landfill has indicated that associated hauling operations would be shut down if there is a related odor complaint.

The WPCP has also implemented additional odor control measures, including: installation of a weather monitoring station measuring temperature, inversion conditions, wind speed and wind direction to determine the best days for hauling biosolids; elimination of the previous sludge stockpiling process (now practicing direct harvest from drying beds to the landfill); institution of an odor complaint clearing house; and institution of downwind odor patrol during biosolids removal operations, with biosolids removal stoppage if down wind odor is detected or if complaints are received.

During previous investigations, the City of Milpitas' sewage pump station was not found to be the source of objectionable odor impacts. City staff has since indicated that the pump station does produce odors, but not of the magnitude of nearby uses such as the Newby Island landfill.

Furthermore, the 1998 settlement (see section 3.2.5, 1998 Settlement Agreement, on page 3-8 herein) stipulates that the McCarthy Ranch Master Plan area, including the three project sites, shall not be used by any "odor sensitive" uses. The settlement defines "odor sensitive" uses as any of the following: *"residential, including single-family residences, multi-family units, hotels, motels, residence inn or club, boardinghouse, or other similar facility with overnight occupancy; schools; free-standing day care facilities; hospitals, convalescent or nursing care facilities; church or outdoor amphitheaters. Day care facilities which are located within fully enclosed, light industrial, office and/or commercial structures and are intended to primarily service the children of the occupants"* of project area development do not fall within the definition. In exchange for this condition, the parties to the settlement agreed not to object to the sale or development of the property for nonresidential use.

Industrial Park and General Commercial uses are not considered to be "sensitive receptors" for a number of reasons. Employees and other occupants of such uses would not generally fit the profile of people who are especially sensitive (i.e., children, the elderly or the ill). In addition, employees and other occupants of such uses are less likely to spend extended periods of time in areas out-of-doors where they would be subject to objectionable odors, or spend extended time on-site during the early morning and evening hours when calmer atmospheric conditions typically result in the highest odor concentrations. Finally, industrial park and shopping center buildings in this area are more likely to be fully enclosed with air conditioning in response to climatic conditions and traffic noise from I-880, thus reducing the potential for odor impacts when indoors.

Due to the combination of the above factors, the occasional occurrence and level of objectionable odors in the vicinity of the three project sites are not considered to represent a significant impact.

Mitigation. No significant impact has been identified; no mitigation is required.

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6. BIOLOGICAL RESOURCES

This EIR chapter describes the existing biological resources on the three project sites and in the vicinity, potential project impacts on those resources, and measures warranted to mitigate identified significant impacts.

The habitat descriptions in this chapter are based on the biological resources findings of the City-certified 1996 McCarthy Ranch General Plan Amendment EIR (SCH #94073003), 1999 McCarthy Ranch General Plan Amendment Supplemental EIR (SCH #96092061), and subsequent special surveys conducted in July 2000 and October 2000.

6.1 SETTING

6.1.1 General Conditions

As illustrated on Figures 3.1 and 3.2 in chapter 3 herein, the three non-contiguous project sites are located in a developing urban area along the west side of North McCarthy Boulevard between SR 237/Calaveras Boulevard and Dixon Landing Road. The west edge of each site is contiguous to a 6-to-10-foot levee that separates the site from the adjacent Coyote Creek riparian corridor.

The three sites are located within the approximately 203-acre McCarthy Ranch Master Plan area that was the subject of the above-referenced 1996 McCarthy Ranch General Plan Amendment EIR, 1999 McCarthy Ranch General Plan Supplemental EIR and subsequent special habitat surveys conducted in July and October of 2000.

Like all of the McCarthy Ranch Master Plan area, the three sites are characterized by relatively flat, level plain, long used for agriculture, and generally void of natural vegetation due to past and remaining agricultural activity.

Site A at approximately 44.20 acres remains in interim agricultural use, with most of the property cultivated for row crops. Dirt farms roads and several agricultural structures including packing sheds and worker housing are also located on the property. Sites B and C, at 5.00 acres and 9.34 acres, respectively, also remain in interim agricultural use with most of the two sites cultivated for row crops.

6.1.2 Biotic Surveys

Reconnaissance-level field surveys of the 203-acre McCarthy Ranch Master Plan area were conducted in September and October of 1994 to identify and map biotic habitats, identify plants found on the area and assess the suitability of the area to support special-status plant and animal species. Follow-up surveys were conducted for the approximately 140-acre undeveloped portion of the Master Plan area west of North McCarthy Boulevard, including the three project sites, in July and October of 2000.

6.1.3 Onsite Biotic Habitats

(a) Vegetation. All natural vegetation on the three project site has been long displaced by agricultural activity. The majority of the three project sites consist of cultivated fields planted with row crops, including red pepper and cucumbers. The fields are generally tilled before and after crop production. Portions of all three sites may occasionally be left fallow. Ruderal (weedy) vegetation occurs within and surrounding the fields in small patches throughout the three sites. A uniform row of street trees lines the McCarthy Boulevard edge of all three properties, within the roadway right-of-way.

There are four trees located immediately north and west of the largest packing shed on site A. At least one of these trees may meet the City of Milpitas definition of an "ordinance-sized" tree and may therefore be subject to the City of Milpitas Tree Ordinance.[1]

(b) Wildlife. Wildlife use of the agricultural habitat within the McCarthy Ranch Master Plan area, including the three project sites is generally limited. Numerous bird species have been observed foraging above and near the cultivated fields on-site, including Loggerhead Shrike, Black Phoebe, Rock Doves, American Crows, Common Rave, Brewer's Blackbird, European Starlings, Barn Swallows, and violet-green swallows. Other species of small animals that typically occur in such habitats in the area include Norway rats, striped skunk, California ground squirrel, Canada geese, brush rabbit and California vole, as well as associated predators including Red-tailed Hawk, Northern Harrier, Barn Owl, and red fox. The wildlife habitat value of the project site agricultural fields is limited due to the lack of cover and extensive farming activity.

6.1.4 Nearby Habitats

As indicated in chapters 3 and 11 herein, a variety of land uses border the site including the 65-acre Campus at McCarthy Ranch (Equity Office Campus) research and development/office complex immediately to the south (currently the subject of a pending application to expand the development floor area), the 82-acre McCarthy Ranch marketplace shopping center development and 75-acre Irvine Business Park development on the opposite side of North McCarthy Boulevard; the vacant 10-acre Macronix property between sites A and B, which remains in cultivated agricultural use; and the City sewer lift station between sites B and C. Coyote Creek and the Santa Clara Valley Water District-owned Coyote Creek open space and flood control corridor are located to the west, separated from the three project properties by a 6-to-10-foot earthen levee. Extensive sewage treatment sludge lagoons and drying beds and additional cultivated agricultural lands are located west of the Coyote Creek corridor.

6.1.5 Special-Status Species

For purposes of this analysis and following common practice, "special-status species" are defined as those plants and animals that are listed and legally protected under the State and Federal Endangered Species Acts (including candidate species) or other regulations, plants listed on the California Native Plan Society's Inventory of Rare and Endangered Vascular Plants of California, animals designated as Species of Special Concern by the California Department of Fish and Game (CDFG), and species that are considered rare by the scientific community.

[1]The Milpitas Tree Ordinance is included in Title X, chapter 2, of the City of Milpitas Municipal Code.

Rare, endangered, or threatened species are protected by the Federal Endangered Species Act of 1973 (as updated in 50 CFR § 17.11 and 17.12, January 1992), the California Native Plant Protection Act of 1997, and the California Endangered Species Act of 1970 (California Administrative Code Title 14, section 670.2 and 670.51). The California Environmental Quality Act (CEQA) (January) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in section 15380.

Information concerning threatened, endangered and/or other special-status plant or animal species that may occur within the McCarthy Ranch Master Plan area, including the three project sites, has been collected and reviewed from several sources and fully described in the City-certified 1996 and 1996 McCarthy Ranch General Plan Amendment EIR and SEIR.

It has been generally determined in these previously certified CEQA documents that most special status species in the Bay Region use habitats that are not present within the McCarthy Ranch Master Plan area, including the three project sites. Salt marsh, freshwater marsh, other wetland types, serpentine grassland, oak woodland and riparian habitats are not present within the three project sites. However, several apparently abandoned ground squirrel burrows have been identified in the banks of the Coyote Creek levee immediately west of the three project sites which could potentially be used by Burrowing Owls, a special status species--i.e., a federal "species of concern" and a California "species of special concern." In addition, mature trees and brush within the adjacent Coyote Creek riparian corridor could be utilized by nesting or foraging raptors, such as falcons, hawks, eagles and owls. Nesting raptors are among the special status species protected under the provisions of the federal Migratory Bird Treaty Act and CDFG regulatory provisions (CDFG Code sections 3503, 3053.5 and 3800).

Federal "species of concern" are species for which the data are insufficient at this time to support a federal listing proposal. Additional field research and data collection are necessary in order to classify these species as either candidates for listing or remove them from consideration. Federal species of concern are not protected under the Federal Endangered Species Act.

California "species of special concern" are species listed by the CDFG as those California breeding populations that are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines, some species of special concern would be considered "rare." Any unmitigated impacts to rare species would be considered under the CEQA Guidelines to be a "significant effect on the environment." Thus, species of special concern must be considered in evaluating any project that will or is currently undergoing CEQA review.

The federal Migratory Bird Treaty Act of 1918 makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any federally-listed migratory bird, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, wading birds, seabirds, and passerine birds (i.e., perching birds such as warblers, flycatchers, swallows, etc.)

CDFG Code Sections 3503, 3503.5, and 3800 prohibit the "take, possession, or destruction of birds, their nests or eggs" of nesting raptors. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

(a) Special Status Plant Species on Project Sites. No special status plant species have been identified on the three project sits or elsewhere in the McCarthy Ranch Master Plan area. Due to both the lack of appropriate habitat and the highly disturbed condition of the three sites (i.e., long history of agricultural use and cultivation), no special-status plant species are expected to occur onsite. The City-certified 1996 EIR and 1999 SEIR determined that no further survey for special-status plants was warranted.

(b) Special Status Wildlife Species on Project Sites. As indicated previously, the City-certified 1996 EIR and 1999 SEIR determined that the only special-status wildlife species which may breed or be resident within the McCarthy Ranch Master Plan area, including the three project sites, is the Burrowing Owl.

Burrowing Owl (*Speotyta cunicularia*). This owl is a federal "species of concern" and a California "species of special concern." Its nest, eggs, and young are protected under the California Fish and Game Code (sections 3503, 3503.5, and 3800). The Burrowing Owl is also protected from direct take under the federal Migratory Bird Treaty Act (16 U.S.C. 703-711).

Burrowing Owl habitat can be found in annual and perennial grasslands, characterized by low-growing vegetation. Typically, the Burrowing Owl utilizes rodent burrows, usually ground squirrel burrows, for nesting and cover. They may also on occasion dig their own burrows. They exhibit high site fidelity, reusing burrows year after year.

In 2000, two Burrowing Owl surveys were conducted for 140-acre portion of the McCarthy Ranch Master area located west of North McCarthy Boulevard, including the three project sites. The first survey was conducted by *Live Oak Associates*, consulting biologists, in July 2000. Several apparently abandoned ground squirrel burrows were identified on the Coyote Creek levee bank to the west of the project sites. No signs of Burrowing Owl occupation were found, but many of the burrows were deemed suitable for use by Burrowing Owls. Based on these findings, four additional surveys were completed to determine the presence/absence of Burrowing Owls in the identified burrows. No Burrowing Owls were detected during the four subsequent surveys. Based on the results of the surveys and the negative findings of previous owl surveys, *Live Oak Associates* concluded that Burrowing Owls do not occupy the 140-acre portion of the McCarthy Ranch Master Plan area.

In October 2000, a follow-up Burrowing Owl survey was conducted by *Harding Engineering and Environmental Services*. Burrowing Owls were not observed on-site and no suitable burrows were found as the site was recently tilled. Some gopher burrows were found, but no evidence of Burrowing Owls (such as feathers, pellets, prey remains, etc.) were found near these burrows. Based on the results of the survey, *Harding Engineering and Environmental Services* also concluded that Burrowing Owls do not occupy the McCarthy Ranch Master Plan area.

Although no owls or indications of owl presence were observed and it has been determined that Burrowing Owls are likely absent from the three project sites, some of the individuals of the Burrowing Owl populations in this region are migratory, and owls could occupy one or more of the three sites at other times of the year, such as the breeding season (typically February 1 through August 31).

6.2 IMPACTS AND MITIGATION MEASURES

6.2.1 Significance Criteria

The CEQA Guidelines state that a project will normally have a *significant* effect on the environment if it will *"substantially affect a rare or endangered species of animal or plant or the habitat of the species."* According to the Guidelines, a project would have a potentially significant or significant impact on biological resources if it would:[1]

(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plan, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

(c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

6.2.2 Impacts on Special-Status Species

Impacts on Special-Status Plants. No special-status plant species have been observed on the three project sites and, based on the lack of suitable habitat, none are likely to occur. Therefore, no impacts to special-species plant populations are expected from the proposed project.

Mitigation. No significant impact has been identified; no mitigation is required.

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[1]CEQA Guidelines, Appendix G, item IV(a-f); and CEQA Guidelines, Section 15065(a).

Impact 6-1: Potential Project Impacts on Burrowing Owl. The project would provide for development of lands that include potentially suitable habitat for the Burrowing Owl. No Burrowing Owls have been detected on any of the three project sites during four previous reconnaissance surveys of the McCarthy Ranch Master Plan area. Based on the results of two of these previous surveys, the City-certified 1996 McCarthy Ranch General Plan Amendment EIR and 1999 McCarthy Ranch General Plan Amendment SEIR, which both addressed proposed development of the approximately 203-acre McCarthy Ranch Master Plan area (including the three project sites), concluded that Burrowing Owls do not occupy the area. However, because the project site may occasionally include rodent burrows (gopher and squirrel burrows have been previously found), some individuals of Burrowing Owl populations in the region are migratory, and Burrowing Owls have been known to occupy disked land, the owl could occupy one or more of the three sites now or in the future. The Burrowing Owl is a federal "species of concern" and a state "species of special concern," and is protected under the federal Migratory Bird Treaty Act and state Fish and Game Code (CDFG Code Sections 3503, 3503.5 and 3800). Possible impacts of the project on the Burrowing Owl include loss of foraging and nesting habitat and possible death of nesting and young birds, representing a "take" under the federal Migratory Bird Treaty Act and a ***potentially significant impact*** [see criterion (a) under section 6.3.1, "Significance Criteria," above].

Mitigation 6-1. The CDFG defines the migratory bird breeding season as February 1 through August 31. If it is not possible to schedule project demolition and construction activities between September 1 and January 31, *pre-construction surveys of the project site for nesting birds* shall be completed by a qualified biologist or ornithologist, following current CDFG survey protocol, to ensure that no Burrowing Owl nests will be disturbed during project implementation. The pre-construction surveys shall be completed no more than 14 days prior to the initiation of demolition or construction during the early part of the breeding season (February through April) and no more than 30 days prior to initiation of these activities during the late part of the breeding season (May through August) to assure "take" avoidance. During this survey, the biologist or ornithologist shall inspect all burrows and other possible Burrowing Owl nesting habitats immediately adjacent to the construction areas for nests. The pre-construction survey report must be submitted to CDFG for review and approval. Verification that the CDFG has determined that the pre-construction surveys are adequate must be provided to the City.

(continued)

Mitigation 6-1 (continued):

If an active nest is found sufficiently close to the activity areas to be disturbed by the activity, the biologist or ornithologist, in consultation with the CDFG, shall implement the following additional or similar protection measures, subject to CDFG approvals:

- No Burrowing Owls shall be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted as a means to avoid take, pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction.

- A protected area 250 feet in radius, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls or individual resident owls. This protected area will remain in effect between February 1 and August 31, or at the CDFG discretion and based upon monitoring evidence, until any young owls are foraging independently. In the non-nesting season, a protected area 165 feet in radius, within which no new construction activity will be permissible, will be maintained between project activities and burrows occupied by Burrowing Owls. Any development within these protected areas would be approved beforehand by the CDFG.

Written verification that the CDFG has approved the above or a similar mitigation approach shall be submitted to the City before a demolition or grading permit will be issued.

Implementation of this measure will reduce this impact to a ***less-than-significant level***.

Impact 6-2: Potential Project Impacts on Nesting Raptors. The project would provide for development activity (building demolition, site grading and building construction) adjacent to the Coyote Creek riparian corridor. The riparian corridor may be utilized by nesting or foraging raptors protected under the provisions of the federal Migratory Bird Treaty Act and CDFG Code sections 3503, 3503.5 and 3800.

The proposed project would not directly impact the riparian corridor. To implement creek corridor mitigation recommendations identified in the 1996 McCarthy Ranch General Plan Amendment EIR, the applicant sold a 6-acre strip of land between the proposed project sites and the Creek Corridor to the City of San Jose for use in creating the existing Coyote Creek open space buffer. Nevertheless, project

(continued)

Impact 6-2 (continued):

demolition or construction activity near riparian corridor raptor nests could result in indirect disturbance, including incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, which would be considered a "take" under the CDFG code, and therefore represents a ***potentially significant project impact*** [see criterion (a) under section 6.3.1, "Significance Criteria," above].

Mitigation 6-2. Implement Mitigation 6-1. During the Mitigation 6-1 survey, the biologist or ornithologist shall also observe all trees and other possible nesting habitats immediately adjacent to the construction areas for raptor nests. If an active raptor nest is observed sufficiently close to the work areas to be disturbed by demolition or construction activities, the biologist or ornithologist, in consultation with the CDFG, shall determine the extent of necessary construction-free buffer zone to be established around the adjacent raptor nest, typically 250 feet, to ensure that raptor nests will not be disturbed during project construction. No construction activity shall be permissible within the buffer zone during the nesting season (February 1 through August 31). As stipulated in the 1999 SEIR, written verification that CDFG has approved this mitigation plan must be submitted to the City before a demolition or grading permit will be issued. Implementation of this measure would reduce this impact to a ***less-than-significant level***.

Impact 6-3: Loss of Ordinance-Sized Trees. Project site A includes four trees adjacent to the largest packing shed, and all three sites include existing street trees along their North McCarthy Boulevard frontages. One or more of these trees may meet the City of Milpitas Tree Ordinance definition of an "ordinance-size" tree--i.e., 37 inches or greater in circumference at a height of four and one-half feet above ground level. Therefore, implementation of the project could result in the loss of one or more ordinance-sized trees, which would represent a ***significant impact*** [see criterion (a) under section 6.3.1, "Significance Criteria," above].

Mitigation 6-3. No ordinance-sized tree shall be removed from any of the three project sites without a City-issued tree removal permit. Pursuant to the City of Milpitas Municipal Code Tree Ordinance, any ordinance-sized tree to be removed from one of the three project sites shall be replaced at a 3:1 ratio within the project site. The City shall approve or determine the species of the replacement trees. Implementation of this measure would reduce this impact to a ***less-than-significant level***.

7. CULTURAL AND HISTORIC RESOURCES

This EIR chapter describes possibilities for the existence of cultural and historic resources on the three project sites, possible project impacts on potential resources, and related mitigation needs. The chapter incorporates findings from section 4.6 (Cultural and Historic Resources) of the Milpitas General Plan (March 2002) and section 3.K (Cultural Resources) of the 1999 McCarthy Ranch General Plan Amendment SEIR.

7.1 SETTING

7.1.1 Prehistoric Resources

The lands now occupied by the City of Milpitas were once a part of the home territory of the Tamyen tribelet of the Costanoan (Ohlone) Indians. The Costanoan people inhabited the San Francisco Bay area and predated Spanish occupation by up to 4,000 years. The people were semi-nomadic but would generally return to village sites season after season. Village sites were marked by shells and other refuse, in some instances eventually creating raised "shell mounds."

Like other Costanoan groups, the Tamyen maintained a few year-round village sites in the Milpitas vicinity but also visited various temporary camps at different seasons of the year to hunt and gather food as it became available. Related archaeological sites in the Milpitas vicinity tend to be situated on alluvial fans near historic bay and/or marsh margins, as well as along former and existing sources of fresh water. Two notable Costanoan village sites lie within the Milpitas city limits. Both are east of I-880, well removed from the three project sites.[1] Nevertheless, since the project area was previously subject to flooding (prior to construction of the adjacent Coyote Creek levee and other recent flood control improvements), is located on an alluvial fan adjacent to Coyote Creek, and is south of former marshlands, it is possible that artifacts associated with early Native American village locations could remain buried in the local alluvium.

7.1.2 Historic Resources

The Historic and Cultural Resources section of the Milpitas General Plan indicates that there are currently 13 sites within the city limits officially designated as "Cultural Resources." The City's Historic Resources Master Plan has designated six of these sites, and two more sites that are listed in the City's Historic Sites Inventory, as "prime candidates for preservation."[2] None of these identified historic resource sites is located on or adjacent to the three project sites.

[1]Milpitas General Plan, section 4.6, Historic and Cultural Resources, page 4-19.

[2]Milpitas General Plan, section 4.6, Historic and Cultural Resources, pages 4-21 and 4-22.

7.2 PERTINENT PLANS AND POLICIES

The Milpitas General Plan includes a Guiding Principle calling for the preservation of existing historic and cultural resources (Guiding Principle 4.f-6-1) but no associated Implementing Policies directly relevant to the three project sites and proposed project.

7.3 IMPACTS AND MITIGATION MEASURES

7.3.1 Significance Criteria

Based on the CEQA Guidelines, the project would be considered to have a significant cultural resources impact if it would:[1]

(a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5;

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

(d) Disturb any human remains, including those interred outside of formal cemeteries.

7.3.2 Impacts and Mitigation Measures

Disturbance of Historic Resources. As outlined in subsection 7.1.2, no on-site historic resources are known to exist, nor would any known off-site historic resources be affected by the proposed project.

Mitigation. No significant historic resources impact has been identified; no mitigation is necessary.

Impact 7-1: Project-Related Potential for Disturbance of Archaeological Resources. The proposed project would provide for future development of the three project sites with office and community shopping center uses. Such development activity, including grading/excavation for foundations and infrastructure, could disturb as yet unidentified sensitive, on-site, subsurface archaeological resources. This possibility represents a ***potentially significant impact*** (see criteria (b) and (d) under section 7.3.1, "Significance Criteria," above).

Native American (Coastanoan) resource sites occur in the immediate region. One or more concentrations of archaeological or historic material (e.g., buried historic artifacts or archaeological deposits) might be found under on-site alluvium, particularly due to the

[1]CEQA Guidelines, Appendix G, item V(a-d).

proximity of the three sites to Coyote Creek. It is possible that foundation and infrastructure construction associated with the proposed project could uncover concentrations of materials associated with early nomadic activity, village locations or historic occupation of the area.

Mitigation 7-1. Require that a qualified archaeologist be retained at applicant expense to periodically monitor initial project-related on-site building foundation, infrastructure, and other excavation.

In the event that subsurface cultural resources are encountered during approved ground-disturbing activities, work within a 160-foot radius shall be stopped, the Milpitas Director of Planning & Neighborhood Services (Director) shall be notified, and the retained archaeologist shall evaluate the finds and make appropriate recommendations. The archaeologist's recommendations could include some combination of collection, recordation, analysis and/or capping of any materials identified as significant. The archaeologist's findings shall be documented and submitted to the Director. If disturbance of a project area cultural resource cannot be avoided, a mitigation program in compliance with sections 15064.4 and 15126.4 of the CEQA Guidelines shall be implemented.

In the event that any human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped until the Santa Clara County Coroner has been notified and has made a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner or City shall notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most like descendants, the descendants shall make recommendations regarding proper burial, which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

Implementation of these measures would reduce this potential impact to a ***less-than-significant level***.

8. GEOLOGY AND SOILS

This EIR chapter describes existing geologic and soil conditions on the three project sites and project-related impacts and mitigation needs.

8.1 SETTING

8.1.1 Active Earthquake Faults

No active faults are known to occur on or near the three project sites, nor are the sites located in an Alquist-Priolo Special Studies Zone;[1] therefore, fault rupture is not expected.

8.1.2 Seismic Ground Shaking

Although no active faults are located in Milpitas, the city and the project sites are located in Seismic Zone 4, one of the most seismically active regions in the United States. The area could experience strong seismic ground shaking and related effects in the event of an earthquake on one of a number of identified active or potentially active faults in the region (e.g., San Andreas fault, Hayward fault, and Calaveras fault). These identified active or potentially active regional faults have a long history of seismic activity.

8.1.3 Site Topography

According to the U.S. Geologic Survey 7½-Minute Milpitas Quadrangle, site grade varies from about 9 to 16 feet above mean lower low water. The Coyote Creek levee located to the west of the site extends to heights of about 6½ to 9½ feet above existing site grades and has a crest width of about 20 feet.[2]

8.1.4 Site Soils

The project site is located on the Santa Clara Valley Floor, a relatively flat alluvial basin, bounded by the Santa Cruz Mountains to the southwest, the Los Buellis Hills to the east, and San Francisco Bay to the north. In Milpitas, the Valley Floor is underlain by alluvial soil, generally consisting of sand, silt and clay, with groundwater at comparatively shallow depths (less than 25 feet).

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[1]Milpitas General Plan *Seismic and Safety Element*, Figure 5-2, Seismic and Geotechnical Evaluation Requirements (includes mapping of active faults, approximate faults, inferred faults and concealed faults, based on data from the California Department of Conservation, Division of Mines and Geology.

[2]Harza Consulting Engineers and Scientists, Phase I Preliminary Site Assessment and Soil and Groundwater Investigation, McCarthy Ranch Residential Development, Milpitas, California; November 1995, page 2.

The three project sites are located in such an area of alluvial deposits. Soils underlying the site generally consist of soft to hard silty clays and clayey silts which extend to depths of about 1½ to 11 feet below ground surface (bgs). The upper foot of the surface soils have been disturbed by agricultural operations. Underlying the surface soils are soft to hard silty clays and clayey silts interbedded with sandy silt and silty sand lenses; and isolated zones of loose to medium dense silty sands which extend to depths of 4 to 40½ feet bgs. Underlying these soils are soft to hard clays and loose to dense sands, silty sands, and silty gravels which extend to the maximum depth explored of about 44½ feet bgs.

Free ground water has been encountered at 18 to 32 feet bgs. Regionally, ground water flow is generally to the northwest. However, local ground water flow may be westward due to the influence of nearby Coyote Creek.[1]

These subsurface conditions make the project area subject to high shrink/swell potential. Portions of the project sites may also be susceptible to liquefaction. These conditions can present constraints to foundation and infrastructure design and construction.

8.2 PERTINENT PLANS AND POLICIES

8.2.1 Milpitas General Plan Policies

The *Seismic and Safety Element* of the Milpitas General Plan (July 1997) contains the following geotechnical guiding principle and implementing policy pertinent to consideration of the potential geologic and soil impacts of the proposed project:

- *Minimize threat to life and property from seismic and geologic hazards.* (Guiding Principle 5.a-G-1)

- *Require projects to comply with the guidelines prescribed in the City's* Geotechnical Hazards Evaluation *manual.* (Implementing Policy 5.1-I-3)

8.2.2 Uniform Building Code

The engineering techniques and standards adopted by the State of California and the City of Milpitas for geotechnical building safety, including the Uniform Building Code (UBC) provisions for Seismic Zone 4, are widely known and accepted in the professional fields of building design and construction. The UBC has been formulated to ensure that buildings constructed in conformance with its earthquake design provisions can safely withstand the effects of earthquake-induced ground shaking. Individual solutions for particular developments to achieve UBC compliance are typically, and most efficiently, specified at the detailed project design phase. As a result, it is not expected that newly constructed buildings in Milpitas will collapse or otherwise fail structurally during a major earthquake, although they may sustain substantial damage.

[1]Harza, page 2.

8.3 IMPACTS AND MITIGATION MEASURES

8.3.1 Significance Criteria

Based on the CEQA Guidelines, the project would be expected to have a significant soils and/or geology impact if it would:[1]

(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

(1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Division of Mines and Geology Special Publication 42);

(2) strong seismic ground shaking;

(3) seismic-related ground failure, including liquefaction; or

(4) landslides;

(b) Result in substantial soil erosion or the loss of topsoil;

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; or

(d) Be located on expansive soil, as defined by Table 18-1-B of the UBC, creating substantial risks to life or property.

8.3.2 Project Impacts

Seismic Ground Shaking. The project sites are subject to potential earthquake hazards (e.g., ground shaking, liquefaction, unstable conditions) during their economic lifetime. The engineering techniques and standards adopted by the State of California and the City of Milpitas for geotechnical building safety, including the UBC provisions for Seismic Zone 4, are widely known and accepted in the professional fields of building design and construction. Individual solutions for particular developments to achieve UBC compliance are typically, and most efficiently, specified at the detailed project design phase. For the proposed McCarthy Ranch Mixed Use Project, the specific construction details addressing exterior and interior seismic requirements for project buildings will be reviewed and approved by the City's Building and Safety Division prior to the issuance of building permits. Therefore, potential project impacts associated with strong seismic ground shaking and seismic-related ground failure are considered ***less-than-significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

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[1] CEQA Guidelines, Appendix G, item VI(a-d).

Ground Instability Impacts. Slope instability, erosion, or landslide related hazards are minimal due to the flat topography of the site. However, the three project sites do include moderate to highly expansive soils which may expand and contract as a result of seasonal or man-made changes in soil moisture conditions. Expansive (shrink-swell) soil conditions have the potential to damage structures and infrastructure improvements. The three sites are also located in a seismically active region and, therefore, strong ground shaking is expected during the lifetime of the proposed project, and soil characteristics underlying the project sites have an associated moderately high potential for liquefaction with substantial damage to project structures and infrastructure improvements.

As previously indicated, regional geologic conditions will require that future project structures be designed and built in conformance with UBC requirements for Seismic Zone 4. Ground stability impacts resulting from conditions on the three sites can be mitigated by utilizing these standard UBC-required engineering and construction techniques. With incorporation of these measures the project would not expose people or property to unacceptable levels of risk associated with on-site geologic and soil conditions.

City-imposed geotechnical investigation requirements include completion of detailed studies to address specific geotechnical and soil concerns as the project design is refined. These requirements provide reasonable assurance that the project would be implemented in a manner that renders insignificant or minimizes potentially significant soil and geology impacts of the project. The City of Milpitas routinely requires such geotechnical/geologic investigation and specification at phases of development review that follow EIR certification.[1]

A significant record exists demonstrating the effectiveness of such post-EIR-certification design and engineering requirements in mitigating the potential soil and geologic impacts of concern identified in this EIR chapter. Under the City's grading permit and building permit provisions, requirements, and regulations, the project cannot be given final approval without project compliance with UBC Seismic Zone 4 and other standard geotechnical/geologic requirements. There is substantial, reasonable, historic information to support the conclusion that the specific subsequent geotechnical/geologic investigations, inspections, and specific formulations required to meet established City standards would adequately mitigate related impacts to **less-than-significant** levels by either avoiding identified soil and geologic impact areas altogether or by rectifying the impact through conventional engineering and construction procedures identified through the post-EIR investigation and monitoring process.

Mitigation. No significant impact has been identified; no mitigation is required.

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[1]The techniques and standards for geotechnical mitigation are widely known and accepted. Individual measures for particular projects are typically, and most efficiently, specified at a detailed level of design which cannot be expected at this EIR stage of the proposed McCarthy Ranch Mixed Use project.

9. HAZARDS AND HAZARDOUS MATERIALS

This EIR chapter describes known and potential hazardous materials conditions in the project vicinity and within the three project sites, related potentially significant adverse public health impacts anticipated as a result of the proposed office park and community shopping center development, and associated mitigation needs. (Please refer to chapter 8 of this EIR, Soils and Geology, for discussion of potential seismic safety issues and chapter 10, Hydrology and Water Quality, for discussion of potential flood hazards.)

9.1 SETTING

9.1.1 General Concerns

For purposes of this EIR, "hazardous materials" are defined as substances with certain chemical and physical properties that could pose a substantial present or future hazard to human health or the environment if improperly handled, stored, disposed, or otherwise managed. If improperly managed, hazardous materials can result in public health hazards through direct human contact, through human contact with contaminated soils or groundwater, or through airborne releases in vapors, fumes, or dust.

Construction workers typically have the greatest risk of exposure to contaminated soil or groundwater or to contamination in existing buildings to be modified or demolished. If contamination at a site remains undetected, workers and the public may be at risk of exposure if precautions are not taken during site development.

9.1.2 Onsite Conditions

The three project sites are located in a developing, generally flat area of Milpitas west of I-880. The area, including the McCarthy Ranch Master Plan area between Dixon Landing Road and SR 237-Calaveras Boulevard, has been partially developed with a mix of industrial park, office, R&D and commercial uses.

The three project sites have been in active agricultural use for over 100 years. The majority of the area on all three sites is periodically cultivated and irrigated for row crops. Row crop production typically involves the use of pesticides, herbicides and fertilizers which could result in residual soil contamination.

In addition, site A includes approximately a dozen single-story buildings of various types and sizes--i.e., barns, produce storage and packing sheds, warehousing, seasonal worker housing, accessory storage tanks, equipment storage yards, and parking areas--that could contain hazardous materials (asbestos, lead-based paint, agricultural chemicals, fuel, etc.), or could have resulted in underlying soil or groundwater contamination.

A *Phase I Preliminary Site Assessment and Soil and Groundwater Investigation* was performed by Harza Consulting Engineers and Scientists for the remaining undeveloped portion of the McCarthy Ranch Master Plan area, including the three project sites, in 1995 when it was anticipated that the approximately 187-acre property would be developed with single-family and multiple-family housing (1995 Harza Phase I Investigation). The scope of the 1995 Harza Phase I Investigation included:

- a site reconnaissance,
- a review of existing environmental reports for the site and vicinity,
- research of regulatory agency lists of known contaminated sites,
- a limited magnetometer survey to investigate the potential presence of buried tanks or other metallic debris,
- collection of shallow soil and ground water samples, and
- analysis of the soil and ground water samples for suspected contaminants, including pesticides, total petroleum hydrocarbons (TPH), selected metals, and volatile organic compounds (VOCs).

The Harza Phase I investigation was performed under the direction of a State of California registered Environmental Assessor.

The investigation borings revealed free ground water at 18 to 32 feet below the ground surface (bgs). Regionally, ground water flow is generally to the northwest. However, the investigation report indicated that local ground water flow may be westward due to the influence of nearby Coyote Creek.

The Harza investigation review of Santa Clara Valley Water District (SCVWD) files indicated that underground fuel storage tanks had been removed in the past from various locations within the McCarthy Ranch Master Plan area, and that possible residual soil and/or ground water contamination from these removed tanks may remain on-site.

In addition, soil samples collected during the investigation indicated residual DDT, other pesticide compounds, and petroleum hydrocarbons in several samples, but at concentrations "significantly below applicable regulatory criteria" for the then proposed residential uses and below levels requiring cleanup or mitigation. The risk evaluation conducted as part of the investigation concluded that:

- detected concentrations of petroleum hydrocarbons did not appear to represent a significant environmental impact,
- pesticide concentrations could be present on the site at higher concentrations, requiring some mitigation (e.g., placement of impacted soils beneath roads or other paved areas, etc.), and
- conditions at removed UST sites may require additional investigation.

9.1.3 Offsite Conditions

A search of available federal and state environmental records (jurisdictional and regulatory data bases) recently conducted for the adjacent Campus at McCarthy Ranch project has indicated that there are no known jurisdictional agency-identified or supervised hazardous waste sites, hazardous materials generators, large quantity hazardous materials handlers, targeted or active hazardous materials remediation sites, or other sites which generate, transport, store, treat and/or dispose of substantial amounts of hazardous waste within 0.25 miles of that adjacent site, and there are no identified federal Superfund sites within one mile of that adjacent site. One listed leaking underground storage tank (LUST) was identified in the vicinity, at 155 Milpitas Road, approximately 0.4 to 0.7 miles from project sites A, B, and C. In addition, the Santa Clara-San Jose Water Pollution Control Plant and Newby Island Landfill are both located west of Coyote Creek, downgradient from the three project sites. Given the distances and topographic (gradient) relationship of these various offsite locations of concern to the three project sites, it is unlikely that any could adversely impact anticipated development activities on one or more of the three sites.

9.2 PERTINENT PLANS AND POLICIES

9.2.1 Milpitas General Plan

The *Open Space & Environmental Conservation Element* of the Milpitas General Plan describes hazardous waste conditions that affect land use planning in the City, including the City's participation with some Santa Clara County cities in the formulation and implementation of a *Countywide Hazardous Waste Management Plan* (CHWMP). The City has adopted the CHWMP as a policy document. The CHWMP scope is limited to the management of hazardous waste disposal, and the proper storage and handling of hazardous materials. Similarly, the General Plan includes implementing policies regarding the management and disposal of hazardous waste. For potential site or building hazardous materials contamination and remediation concerns, the City follows common practice in deferring to the federal, state and county regulatory agencies charged with appropriate jurisdictional capability and authority (see below).

9.2.2 Federal, State and County Regulatory Agencies

The following federal, state, and county agencies have regulatory authority for the handling and management of hazardous materials and wastes, and general public health and safety within the City of Milpitas:

(a) Environmental Protection Agency. The Environmental Protection Agency (U.S. EPA), Region IX regulates chemical and hazardous materials use, storage, treatment, handling, transport, and disposal practices; protects workers and the community (along with CalOSHA--see below); and integrates the federal Clean Water Act and Clean Air Act into California legislation.

(b) Federal Occupational Health and Safety Administration. The federal Occupational Health and Safety Administration (OSHA) establishes and enforces regulations related to health and safety of workers exposed to toxic and hazardous materials. In addition, OSHA sets health and safety guidelines for construction activities and manufacturing facility operations.

(c) California Occupational Safety and Health Administration. The California Occupational Safety and Health Administration (CalOSHA) is responsible for promulgating and enforcing state health and safety standards and implementing federal OSHA laws.

(d) State of California Water Quality Control Board. The Regional Water Quality Control Board (RWQCB), San Francisco Region, protects surface and groundwater quality from pollutants discharged or threatened to be discharged to the waters of the state. The RWQCB issues and enforces National Pollutant Discharge Elimination System (NPDES) permits and regulates leaking underground storage tanks and other sources of groundwater contamination.

(e) California Department of Toxic Substances Control. The California EPA, Department of Toxic Substances Control (DTSC), regulates hazardous substances and wastes, oversees remedial investigations, protects drinking water from toxic contamination, and warns public potentially exposed to listed carcinogens.

(f) California Highway Patrol/Caltrans. The California Highway Patrol (CHP) and Caltrans have primary regulatory responsibility for the transportation of hazardous wastes and materials.

(g) Bay Area Air Quality Management District. The Bay Area Air Quality Management District (BAAQMD) is responsible for the permitting of industrial air emissions and sets and enforces regional air quality standards.

(h) Santa Clara County. As indicated in section 9.2.1 above, Santa Clara County in cooperation with cities in the County including Milpitas, has developed a *Countywide Hazardous Waste Management Plan* (CHWMP) that addresses issues involving hazardous materials ranging from generation to disposal. The plan delineates local and regional agency procedures and roles during incidents involving hazardous materials. The County Department of Environmental Health also coordinates *Risk Management Plans* for industrial activities.

9.3 IMPACTS AND MITIGATION MEASURES

9.3.1 Significance Criteria

Based on the CEQA Guidelines, the project would be considered to have a *potentially significant impact* related to public health and safety if it would directly or indirectly:[1]

(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

[1]CEQA Guidelines, Appendix G, items VII(a-e).

(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;

(e) For a project located within an airport land use plan, result in a safety hazard for people residing or working in the area; or

(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

9.3.2 Impacts and Mitigation Measures

Future On-Site Hazardous Materials Use and Disposal. Hazardous substances may be stored, generated, and/or used in association with new office park or community shopping center uses proposed as part of the project. All hazardous materials are required to be stored and handled according to manufacturer's directions and local, state, and federal regulations. The City requires all new commercial and other uses to follow applicable local, state and federal regulations and guidelines regarding the storage and handling of hazardous waste under the policies of the County *Hazardous Waste Management Program*. Some of these regulations may include posting of signs, local Fire Department notification, and use of specialized containment facilities.

Required project compliance with these adopted local, state, and federal regulations provides reasonable assurance that any potentially significant health and safety effects associated with project-related hazardous materials storage, generation or use would remain ***less-than-significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

Impact 9-1: Potential for Project-Related Exposure to Onsite Hazardous Soil or Groundwater Contamination. The three project sites remain in active interim agricultural use. The majority of the site area is cultivated and irrigated for row crops. Typically and historically, such row crop management can involve the periodic application of pesticides, fertilizers and herbicides which can result in soil and/or groundwater contamination. In addition, onsite agricultural production activities (packing, transport, etc.) and associated above- and below-ground fuel storage facilities may have resulted in soil and/or groundwater contamination from leaks or spills. As a result, until project compliance with the additional investigation, remediation and closure requirements of the local and state agencies with hazardous materials jurisdiction in Milpitas is demonstrated to City satisfaction, it will be assumed that future site preparation (building demolition, grading, etc.) could result in the release of hazardous materials into the environment, and/or could result in a significant hazard to project construction workers and the public, representing a ***potentially significant impact*** [see criteria (a) and (b) under section 9.3.1, "Significance Criteria," above].

Mitigation 9-1: Prior to undertaking any building demolition, utility construction or issuance of a grading permit for the project, the project applicant shall demonstrate to City satisfaction compliance with all applicable existing local and state site assessment and remediation requirements for potential soil, groundwater and/or existing physical improvement (buildings, storage tanks, etc.) contamination. These requirements include those of the City of Milpitas, Santa Clara County Department of Environmental Health, Regional Water Quality Control Board (RWQCB), and, if applicable, the California Department of Toxic Substances Control (DTSC). Demonstrated compliance with the established requirements of these local and state agencies would provide adequate assurance that this identified potential for a project-related health and safety impact would be reduced to a ***less-than-significant level***.

Typically, implementation of this measure involves following specific mitigation steps:

A state-registered environmental assessor is typically retained to conduct a more detailed Phase II Environmental Site Assessment (Phase II ESA), involving soil, groundwater, and building testing and associated chemical analysis for hazardous substances and/or petroleum hydrocarbons, federal and state protocol collection and testing or original samples of soil, groundwater and building materials to determine qualitative values of various federal and state regulated contaminants. The most frequently tested for substances in the Phase II ESA are petroleum hydrocarbons, heavy metals, pesticides, solvents, asbestos and mold.

As indicated by the results of the Phase II ESA, a qualified professional may need to be retained to complete and implement a Health Risk Assessment which, to the satisfaction of the RWQCB and/or DTSC and Santa Clara County Department of Environmental Health, quantifies the risk of construction worker and public exposures to regulated toxic contaminants, determines whether the quantified risk exceeds federal and state established safe thresholds, and for any exceedances, and establishes an approved site management (remediation) plan (contaminant handling removal, off-haul and disposal), and/or health and safety plan (worker protection measures, etc.).

Potential Asbestos Exposure. No survey of asbestos has yet been conducted for the approximately 12 on-site agricultural structures on project site A to eventually be demolished as part of project implementation. Removal or disturbance of asbestos-containing materials during demolition of these existing on-site structures has the potential for exposing construction workers and the general public to friable asbestos.

As a condition of any project-related building demolition or alteration permit within the project site, the City would routinely require the project applicant to coordinate with the Santa Clara County Department of Environmental Health to determine if asbestos is present. This condition of approval would generally require the project applicant to complete the following steps:

Step 1. Review as-built plans and specifications for existing buildings, and, if necessary, survey the project site and existing affected structures for the presence of asbestos-containing material. The survey shall be performed by a person who is properly

certified by OSHA and has taken and passed an EPA-approved building inspector course.

Step 2. If building elements containing any amount of asbestos are present within the development area, prepare a written *Asbestos Abatement Plan* describing activities and procedures for removal, handling, and disposal of these building elements using the most appropriate procedures, work practices, and engineering controls.

Step 3. Provide the asbestos survey findings, the written *Asbestos Abatement Plan* (if necessary), and notification of intent to demolish to the Santa Clara County Department of Environmental Health at least 10 days prior to commencement of demolition.

Required implementation of these established investigation and remediation requirements provides reasonable assurance that health and safety effects associated with any project-related asbestos disturbance or removal would be ***less-than-significant***.

Mitigation. No significant impact has been identified; no additional mitigation is required.

Project Proximity to the San Jose/Santa Clara Water Pollution Control Plant. The three project sites are located within approximately 1.2 to 1.5 miles from the San Jose/Santa Clara Water Pollution Control Plan (WPCP). The plant is operated by the City of San Jose. The City of San Jose submitted a comment letter, dated October 24, 2008, in response to the City of Milpitas issued Notice of Preparation of this McCarthy Ranch Mixed Use Project Draft EIR (October 24, 2008 San Jose NOP comment letter). No comments regarding the proximity of the three project sites to the WPCP were included in the October 28, 2008 NOP comment letter.

The San Jose WPCP Risk Management Plan (RMP ID 40177) indicates that the plant stores and uses toxic chemicals, including chlorine and sulfur dioxide, to disinfect treated wastewater in order to provide safe water for discharge to the environment and for reclaimed water uses such as landscaping and irrigation. The plant also uses ammonia in combination with chlorine to create chloramine, which is a more stable disinfectant. Storing large quantities of these chemicals can be a hazard.

The City of San Jose and the WPCP maintain and implement a Risk Management Plan/Process Safety Management (RMP/PSM) Program. The City reports that the RMP/PSM Program complies with the U.S. Environmental Protection Agency's (EPA's) Risk Management Program (RMP), pursuant to applicable federal and state regulations.

The WPCP facility currently stores chlorine, sulfur dioxide, digester gas, which are regulated substances under both Federal RMP and California Accidental Release Prevention (CalARP) program regulations, and 19.5 percent aqueous ammonia, which is regulated under CalARP only.

Chlorine and sulfur dioxide are both used in the disinfection process but are stored, transported, and applied in physically separate but similar systems. Chlorine and sulfur dioxide are brought to the site in railcars, which are also used as storage. Up to four chlorine railcars and three sulfur dioxide railcars can be onsite at any one time. The railcars each have a capacity of 90 tons. The railcars are hooked up to the separate chlorine and sulfur dioxide delivery systems.

Chlorine and sulfur dioxide are conveyed in piping as liquids to buildings housing evaporators that convert the liquid chemicals to gases under controlled conditions.

The City of San Jose reports that the chlorine and sulfur dioxide facilities have a number of safety systems and are in full compliance with Santa Clara County's stringent Toxic Gas Ordinance (TGO). The City also reports that in the 32 years that these chemicals have been used onsite, the WPCP has had no accidental release that has required offsite response.

The WPCP chlorine and sulfur dioxide systems are required to have a stringent release prevention and emergency response program by both the Process Safety Management (PSM) Program regulations and the RMP/CalARP regulations because of the quantities stored and potential for offsite impacts.

The WPCP has established a written emergency response program that is followed by the employees to help safely respond to accidental releases of hazardous substances. This program has been coordinated with the City of San Jose Fire Department, which is the local emergency response agency. The program includes an Emergency Response and Evacuation Plan specific to the chlorine and sulfur dioxide processes.

The proposed McCarthy Ranch Mixed Use project represents a Milpitas General Plan anticipated expansion of office, industrial and commercial uses similar to office, industrial uses that already occur in the McCarthy Ranch Master Plan area. Because the three project sites are within proximity of the WPCP RMP identified emergency planning zone, the City of Milpitas may require future occupants of the project site to prepare a response plan for a worst-case WPCP release scenario for City approval prior to issuance of occupancy permits.

Based on all of the above considerations, the project proximity to the San Jose/Santa Clara WPCP represents a ***less-than-significant*** health and safety hazard.

Mitigation. No significant health and safety impact has been identified; no additional mitigation is required.

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10. HYDROLOGY AND WATER QUALITY

This EIR chapter describes existing conditions and potential project impacts associated with hydrology and water quality, including the impacts of project-related changes in peak period stormwater runoff on the local storm drainage system, and potential project effects on water quality in the adjacent Coyote Creek channel. The chapter also recommends mitigation measures for identified significant or potentially significant impacts.

10.1 SETTING

10.1.1 Local Hydrology

Drainage in Milpitas is generally westward. Six intermittent streams (Scott, Calera, Tularcitos, Piedmont, and Berryessa creeks, and Arroyo de los Coches) flow westward out of the foothills and across the flatlands. In the western part of the City, Lower Penitencia and Coyote creeks collect and carry water from these streams northward into the Bay. The perennial Coyote Creek channel is located adjacent to the west boundary of each of the three project sites. Coyote Creek originates approximately 30 miles southeast of Milpitas.

10.1.2 Local Flood Conditions

The topography of all land within the McCarthy Ranch Master Plan area, including the three project sites, is generally flat with ground elevations varying from approximately 9 to 16 feet above mean sea level (MSL).[1]

The three project sites are located within the natural flood plain of Coyote Creek. The potential for related flooding of the three properties is mitigated by the levee that has been constructed along the east bank of the creek at the west edge of the three sites. Constructed by the Santa Clara County Flood Control District (SCCFCD), the Coyote Creek levee extends to heights of approximately 6½ to 9½ feet above existing grades along these edges, and has a crest width of about 20 feet. The levee is substantially offset from the active creek channel, creating a wide floodway.[2]

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program, providing insurance to the public in communities which participate in the program. FEMA publishes Federal Insurance Rating Maps (FIRM), which identify the extent of flood potential in flood prone communities.

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[1]Harza Consulting Engineers and Scientists, Phase I Preliminary Site Assessment and Soil and Groundwater Investigations, McCarthy Ranch Residential Development; Milpitas, California; November 27, 1995; page 2.

[2]Harza, page 2.

The FEMA maps for Milpitas indicate that the three project sites, and almost all land west of Highway 680 in Milpitas, are located within Coyote Creek Flood Zone X. FEMA Flood Zone X is defined as areas protected by levees from a 100-year flood, areas subject to inundation during a 500-year flood, or areas subject to inundation during a 100-year flood with average depths of less than one foot or with drainage areas of less than one square mile.

10.1.3 Local Storm Drainage Collection and Disposal System

The City of Milpitas owns and maintains a municipal storm drainage system which serves all of the city, including the McCarthy Ranch Master Plan area and three project sites. The system collects and disposes storm water via an extensive storm drainage network consisting of catch basins, conveyance piping, pump stations, and outfalls to creeks. The system currently includes approximately 125 miles of storm pipe, approximately 3,000 catch basins, approximately 4 miles of drainage ditches and creeks, and an associated system of storm water pump stations.

An existing municipal storm drain main is located beneath McCarthy Boulevard. The main is 48-inches in diameter along the three project site frontages. The local main discharges into Coyote Creek, which carries the discharged local runoff into San Francisco Bay.

10.1.4 Local Water Quality Concerns

Water pollution is a concern because of potential health effects as well as of the effects of discharged pollutants on aquatic life. The U.S. Environmental Protection Agency has identified urban storm water runoff as the leading cause of water pollution. Furthermore, both federal and state agencies have identified storm water runoff from the City of Milpitas, among others, as a major source of pollution impacting the South Bay.

The water quality of Coyote Creek is directly affected by pollutants contained in discharged stormwater runoff from a variety of urban and non-urban uses. Stormwater from urban uses typically contains metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. Currently, Coyote Creek is listed on the California Water Quality Control Board (WQCB) 303(d) List of Impaired Water Bodies[1] and associated WQCB-maintained Total Maximum Daily Load (TMDL)[2] Priority Schedule, denoting the most severely impaired water bodies on the 303(d) list.

10.1.5 Local Water Quality Control

In response to the water quality concerns described above, the State Water Resources Control Board (SWRCB) administers the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities, which is intended to reduce construction-related stormwater pollution. The City of Milpitas is a co-permittee to the Santa Clara Valley Urban Runoff Pollution Prevention Program's NPDES permit for municipal storm water discharges,

[1]The Federal Clean Water Act (CWA), section 303, establishes water quality standards and TMDL programs. Pursuant to CWA section 303(d), California Water Resources Board (CWRB) maintains a List of Impaired Water Bodies as priority bodies for attainment of Federal and state TMDL objectives.

[2]TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

issued by the Regional Water Quality Control Board (RWQCB). All projects within Milpitas that create, add, or replace 10,000 square feet or more of impervious surface area must comply with the provisions of the SCVURPPP NPDES Permit.

The SWRCB NPDES General Permit for Construction Activities requires developer preparation of Stormwater Pollution Prevention Plans (SWPPPs) to control discharge associated with construction activities for sites one acre or larger. Development on such sites is required to submit a Notice of Intent (NOI) to the SWRCB and prepare a SWPPP prior to construction.

10.1.6 Hydrology of the Three Project Sites

(a) Surface Drainage. The three project sites are located within the natural flood plain of Coyote Creek. The potential for flooding of the three properties is mitigated by the Coyote Creek levee. There is no surface discharge of stormwater directly into any water body from the three project sites. Existing stormwater runoff from the three sites is discharged into the local municipal storm drain system.

(b) Groundwater. Regionally, groundwater flow is generally to the northwest; however, local groundwater flow is more typically westward due to the influence of adjacent Coyote Creek. Groundwater levels in the project area typically fluctuate seasonally depending on the water level in Coyote Creek. In past site area borings, free groundwater has been encountered at depths of approximately 18 to 32 feet below ground surface.

(c) Groundwater Quality. The three project sites are currently in agricultural use, including cultivated row crops. Management of row crops typically involves periodic use of pesticides, herbicides, and fertilizers. The history of the project site also includes the use of agricultural machinery and equipment, and the provision of associated on-site fuel storage facilities. Two above-ground diesel fuel storage tanks (AST), as well as diesel tanks on trailers, have been observed in the past at different locations on site A, associated with farm equipment and irrigation pump operations.

Soil sampling of McCarthy Ranch lands was performed in 1993 for the lands now occupied by McCarthy Ranch Marketplace. DDT compounds (DDD, DDE and DDT) were detected at a maximum total concentration of 0.21 parts per million (PPM). Other pesticides were also detected but at levels "significantly below applicable regulatory criteria" for the then proposed commercial use.[1]

Subsequent soil sampling and analysis investigations conducted in 1995 for the remaining undeveloped McCarthy Ranch Master Plan Area lands determined that pesticides "were not present at concentrations requiring cleanup or mitigation" for the then proposed residential and school uses.[2] However, based on a 1995 jurisdictional file search, it has been determined that there is some possibility that groundwater beneath one or more of the three sites has been impacted by past on- or off-site fuel leak sources (leaking above- and under-ground fuel storage tanks, etc.).[3] Low levels of petroleum hydrocarbons detected in several water samples collected

[1]Harza, page 4.

[2]Harza, pages 5-6.

[3]Harza, page 6.

on one or more of the three project sites in 1995. It was determined at that time that the detected hydrocarbons could be associated with small on-site releases from mobile diesel tanks. The concentrations did not appear to represent a potentially significant environmental impact related to the then proposed residential and school uses.[1]

10.2 PERTINENT PLANS AND POLICIES

10.2.1 Milpitas General Plan Principles and Implementing Policies

The Milpitas General Plan *Seismic and Safety Element* contains the following principles and implementing policies related to hydrology and water quality that are pertinent to consideration of the environmental impacts of the proposed project:

- *Minimize threat to life and property from flooding and dam inundation.* (Guiding Principle 5.b-G-1)

- *Ensure that new construction or substantial improvements to any existing structure result in adequate protection from flood hazards. This includes ensuring that:*

  New non-residential development locate the lowest floor, including basement, above the base flood elevation or incorporate flood-proofing and structural requirements as spelled out in the Municipal Code. (Implementing Policy 5.b-I-1)

10.2.2 Regional Water Quality Regulations

(a) California Regional Water Quality Control Board (RWQCB). Addressing its legal mandates from the U.S. Environmental Protection Agency (EPA) and the state's Porter-Cologne Act, the San Francisco Bay Regional Water Quality Control Board (RWQCB, or Regional Board) developed and adopted its first *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) in 1968. After several revisions and an extensive public hearing process, the current Basin Plan was adopted in 1995 (1995 Basin Plan).[2]

(b) National Pollution Discharge Elimination System (NPDES) Permits. The Federal Clean Water Act of 1972 (CWA), as amended in 1987, prohibits the discharge of pollutants into waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Section 402(p) of the CWA 1987 amendments established a framework for regulating municipal, industrial, and construction stormwater discharges under the NPDES program. In California, NPDES permits are issued through the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). To date, communities with populations over 100,000, high-risk industries identified by the U.S. EPA, and *construction projects of one acre or more of impervious surface* must obtain an NPDES permit. NPDES jurisdiction over the McCarthy Ranch Mixed Use Project resides with the San Francisco Bay RWQCB located in Oakland. Associated NPDES

[1]Harza, page 12.

[2]California Regional Water Quality Control Board, San Francisco Bay Region. *Water Quality Control Plan--San Francisco Bay Basin (Region 2)*, June 1995.

permit requirements applicable to the project were described in previous section 10.1.5, Local Water Quality Control, of this EIR chapter.

10.3 IMPACTS AND MITIGATION MEASURES

10.3.1 Significance Criteria

Based on current CEQA Guidelines, the project would be considered to have a significant hydrology or water quality impact if it would:[1]

(a) Violate any water quality standards or waste discharge requirements;

(b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;

(d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

(e) 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;

(f) Otherwise substantially degrade water quality;

(g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

(h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

(i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam;

(j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

10.3.2 Impacts and Mitigations

Project Flood Exposure Impacts. The three project sites are separated from (outside) the FEMA-designated Coyote Creek 100-year flood zone by the adjacent Coyote Creek levee. If

[1]CEQA Guidelines, Appendix G, items VIII(a, c-f, and i) and IX(b).

the levee were to fail, the three sites would experience flood waters of less than one foot. Therefore, the three project sites are located within a FEMA-designated Flood Zone X, defined as areas protected by levees from a 100-year flood, the 500-year flood hazard zone, or a 100-year flood zone with water depths of less than one foot or with drainage areas of less than one square mile.

The City of Milpitas Municipal Code requires all new buildings within a Special Flood Hazard Area (SFHA) to have the lowest floor elevation (excluding garages) flood proofed or raised a minimum of one foot above the base flood elevation. The proposed project must comply with this City requirement as a condition of future grading plan and construction approvals. Therefore, the proposed project would not expose persons and property to significant flood impacts and will not impede flood flows across the site, and the project flood exposure impact is ***less than significant***.

Mitigation. No significant impact has been identified; no mitigation is necessary.

Project Storm Drainage Impacts. The three project sites are currently primarily occupied by cultivated, permeable cropland with limited impervious areas (i.e., a limited number of buildings and minimal paved areas). Future development of the three sites would replace the existing cultivated agricultural land with impermeable urban surfaces, and would thereby contribute to anticipated cumulative increases in the rate and volume of stormwater runoff into the local municipal storm drainage system. Anticipated that future development of the three project sites as proposed with office park and community commercial uses would result in approximately 80 to 90 percent of the three sites being covered with impervious surfaces such as buildings, surface parking areas and other hardscape. The remaining 10 to 20 percent of the site area would be covered by landscaping and other impervious surfaces. The existing stormwater collection system in the McCarthy Ranch Master Plan area, including the storm drainage main and associated catch basins along McCarthy Ranch Boulevard, have been designed and sized to accommodate full buildout of the three project sites and adjacent areas under the existing MP (Industrial Park) zoning designation, with drainage characteristics (i.e., runoff coefficients) similar to the project-proposed office park and community commercial uses. Therefore, under the City's currently-adopted standard conditions of approval pertaining to stormwater drainage, the proposed project would have a ***less-than-significant*** impact on the capacity of the local storm drainage collection and discharge system.

Mitigation. No significant impact has been identified; no mitigation is necessary.

Project Long-Term Water Quality Impacts. With completion of construction, all project-disturbed areas would be stabilized underneath the new buildings, pavement, and landscaping. As a result, the threat of long-term erosion or increased turbidity and sedimentation from project development would be less-than-significant. Project implementation would add and/or replace more than 10,000 square feet of impervious surface area to the three project sites, and therefore must comply with the City of Milpitas Stormwater C.3 requirements and the SWRCB NPDES permit issuance requirement. In order to meet these C.3 and NPDES requirements, the project would be required to include a set group of standard "best management practices" (BMPs) routinely required by the City to reduce runoff pollutant loads. Following standard City practice, the project applicant would be required to provide the City's Engineering Division with a grading and drainage plan incorporating these requirements and BMPs to City satisfaction as

a condition of approval. The proposed project would therefore have a ***less-than-significant*** long-term water quality impact.

Mitigation. No significant impact has been identified; no mitigation is necessary.

Impact 10-1: Project Temporary (Construction Period) Water Quality Impacts. Future project construction activities, including excavation and grading, would increase the potential for erosion and sedimentation until paving and planting are completed. Construction activities could therefore result in temporary increases in erosion which could cause the degradation of water quality within Coyote Creek and San Francisco Bay, representing a ***potentially significant impact*** [see criteria (a), (c) and (f) under section 10.3.1, "Significance Criteria," above]. Once construction is complete and all disturbed soil surfaces have been planted, erosion from the site and associated sedimentation entering Coyote Creek would be minimal.

Site grading, topographic modifications (e.g., filling) and building construction would extend over most of the surface area of the three project sites. Graded areas not immediately paved or occupied by buildings would temporarily expose soil surfaces to rain impact and erosion via overland runoff. Such construction period erosion could convey sediments downslope to local storm drain inlets, which would eventually discharge into Coyote Creek. Resulting sedimentation in Coyote Creek could increase short-term turbidity levels, water temperature, and biotic productivity. Increased creek sedimentation could also reduce floodwater conveyance at low tides and hasten the need for channel dredging.

Mitigation 10-1: In accordance with City Stormwater C.3 requirements and National Pollution Discharge Elimination System (NPDES) regulations, the project would be required to file a Notice of Intent with the State Water Resources Control Board (SWRCB), Division of Water Quality, prior to issuance of a grading permit. The filing would be required to include a description of erosion control and stormwater treatment measures to be implemented during (including *Start at the Source* measures) and following project construction, as well as a schedule for monitoring of performance. These measures are referred to as Best Management Practices (BMPs) for the control of point and non-point source pollutants in stormwater and would constitute the project *Stormwater Pollution Prevention Plan* (SWPPP).

No grading permit would be issued by the City until a NPDES permit is issued, demonstrating that project erosion control and stormwater treatment measures, including the project SWPPP, meet SWRCB requirements.

(continued)

Mitigation 10-1: continued:

The project would then be required to fully implement the erosion control and other water quality measures cited in the SWPPP and monitor these measures during the SWPPP-specified time period following completion of project construction. The RWQCB would be responsible for inspecting these measures, while the project sponsor would be responsible for implementing any remedial measures if the Board indicated that site stormwater quality objectives were not being met. The City Engineering Division would also be responsible for post-construction inspection of all water quality mitigation measures that would eventually become part of the maintained infrastructure of the project, including source control and water quality treatment measures.

Implementation of these measures would reduce the construction-related soil erosion and sedimentation impacts to a ***less-than-significant level***.

The developer of each of the three project sites and the developer's civil engineering consultant(s) would be responsible for incorporating *Start at the Source* stormwater control measures to the satisfaction of the City Engineer. The developer would also be responsible for filing a Notice of Intent with the State Water Resources Control Board to obtain an NPDES General Permit. The Milpitas Public Works Department Engineering Division would be responsible for confirming that the applicant had filed the Notice of Intent and for reviewing the SWPPP approved by the state. The project developer would be required to fully implement the erosion control and other water quality measures cited in the SWPPP and to monitor these measures during a specified period following completion of project construction. The RWQCB would be responsible for inspecting these measures, while the project developer would be responsible for implementing any remedial measures if the Board indicated that site stormwater quality objectives were not being met. The City Engineering Division would also be responsible for post-construction inspection of all measures that would eventually become part of the maintained infrastructure of the project, including source control and water quality treatment measures.

Project Groundwater Impacts. Groundwater in the project vicinity does not provide a source of drinking water. Water supply for the project would be provided by the City of Milpitas, and groundwater supplies would not be used. Therefore, the proposed new development would not result in new significant impacts to groundwater supply or recharge.

Mitigation. No significant impact has been identified; no mitigation is required.

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11. LAND USE AND AGRICULTURE

This EIR chapter describes the potential land use and agricultural implications of the project, including project relationships to pertinent local and regional land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect.

11.1 SETTING

11.1.1 Existing On-Site Land Uses

The three non-contiguous project sites are located on the west edge of the City in a developing area along the west side of North McCarthy Boulevard between SR 237/Calaveras Boulevard and Dixon Landing Road. The three sites have generally flat, valley floor topography and are generally void of natural vegetation due to past and remaining agricultural activities. Figure 11.1 shows existing land uses on the project sites (sites A, B, and C) and in the vicinity.

(a) Existing Land Uses on Site A. Site A (the south parcel) is approximately 44.20 acres in size and remains in interim agricultural use, with most of the site still actively cultivated for row crops. A McCarthy Ranch agricultural produce storage and packing facility is located in the center of the site. The facility includes approximately a dozen single-story buildings of various types and sizes--i.e., barns, produce storage and packing sheds, warehousing, seasonal worker housing, accessory storage tanks, equipment storage yards and parking areas.

(b) Existing Land Uses on Site B. Site B (the middle parcel) is approximately 5.00 acres in size and also remains in interim agricultural use, including areas cultivated for row crops. No structures exist on site B.

(c) Existing Land Uses on Site C. Site C (the north parcel) is approximately 9.34 acres in size and also remains in interim agricultural use, including areas cultivated for row crops. No structures exist on site C.

11.1.2 Existing Adjacent and Nearby Land Uses

The three project sites are located within the approximately 203-acre McCarthy Ranch Master Plan area, approximately 60 percent of which has been developed. North McCarthy Boulevard adjoins the east edge of each of the three project sites, as well as the north edge of site C. Interstate 880, which provides regional access to the project site vicinity, is located immediately east of and runs parallel to North McCarthy Boulevard.

Existing land uses adjoining and in proximity to the project sites are described below and illustrated on Figure 11.1.

(a) Campus at McCarthy Ranch (Equity Office Campus). The 65-acre site of the Campus at McCarthy Ranch (Equity Office Campus) research and development/office complex (location 1

PROJECT SITE

A	South Parcel	44.20 acres
B	Middle Parcel	5.00 acres
C	North Parcel	9.34 acres
TOTAL		58.54 acres

ADJACENT USES

1 Campus at McCarthy Ranch Project (industrial/office)
2 McCarthy Ranch Marketplace (commercial)
3 Irvine Business Park
4 Macronix site (Industrial Park zoning)
5 City Sewer Lift Station
6 Bayside Market Place Project (commercial)
7 Fremont Tech Center Phase 2 Project (R&D/industrial)
8 Fremont Tech Center Phase 1 Project (industrial)
9 PG&E Natural Gas Terminal and Electrical Substation
10 San Jose/Santa Clara Water Pollution Control Plant
11 Sludge Drying Beds
12 Sludge Storage Lagoons
13 Newby Island Landfill

SOURCE: Wagstaff and Associates

Figure 11.1

LAND USES IN THE PROJECT VICINITY

on Figure 11.1) is located on the west side of North McCarthy Boulevard adjoining the south boundary of site A (see photo 4). The campus currently includes three existing two- and three-story research and development (R&D) and office buildings totaling approximately 496,500 square feet in floor area, plus an existing large surface parking area. The campus is currently the subject of a pending proposal to retain these existing uses and construct six new industrial/office buildings totaling approximately 946,350 square feet, for a site floor area total of approximately 1.44 million square feet--i.e., a FAR of approximately 0.50.

(b) McCarthy Ranch Marketplace. The approximately 82-acre McCarthy Ranch Marketplace shopping center (location 2 on Figure 11.1) is located on the opposite, east side of North McCarthy Road, southeast of site A.

(c) Irvine Business Park. The approximately 75-acre Irvine Business Park (location 3 on Figure 11.1) is located on the east side of North McCarthy Road, directly opposite (east of) site A. The Irvine Business Park is an office, R&D, and light industrial campus.

(d) Macronix Property. The approximately 10-acre Macronix property (location 4 on Figure 11.1) is located on the west side of North McCarthy Road between sites A and B (i.e., north of site A and south of site B). The property is currently vacant and is zoned for industrial use (MP--Industrial Park).

(e) Milpitas Sanitary Sewer Pump Facility. The City-owned Milpitas sanitary sewer pump facility (location 5 on Figure 11.1) occupies the approximately 7-acre property between sites B and C (i.e., north of site B and south of site C--see photo 2).

(f) Coyote Creek. Coyote Creek and the Santa Clara Valley Water District-owned Coyote Creek open space and flood control corridor adjoin the west edge of each of the three project sites (see Figure 11.1). The creek corridor is separated from the three properties by an earthen levee ranging in height from 6 to 10 feet (see photos 1, 2, and 3). The paved Coyote Creek Trail is located at the top of the levee. The trail is paved for pedestrian and bicycle use and is a dedicated segment of the San Francisco Bay Trail system.

(g) Area West of Coyote Creek. Extensive sludge lagoons and drying beds associated with the San Jose/Santa Clara Water Pollution Control Plant, additional cultivated agricultural areas, and a PG&E natural gas terminal and electrical substation facility are located west of the Coyote Creek Corridor.

(h) Area North of Site C. Undeveloped land zoned for industrial use (MP--Industrial Park) is located north of site C on the opposite, north side of North McCarthy Road.

11.1.3 Cumulative Development Trends in the Project Vicinity

Table 11.1 lists other currently pending and anticipated development in Milpitas and Fremont.

(a) Milpitas. As shown, excluding the proposed project, a total of approximately 551,344 square feet of office/research and development (R&D) floor space and 430,583 square feet of retail/commercial floor space are currently pending, have recently been approved, or are under construction in the City of Milpitas. In addition, a total of approximately 80 single-family housing units and 6,236 multi-family housing units are currently pending, have recently been approved, or are under construction in Milpitas.

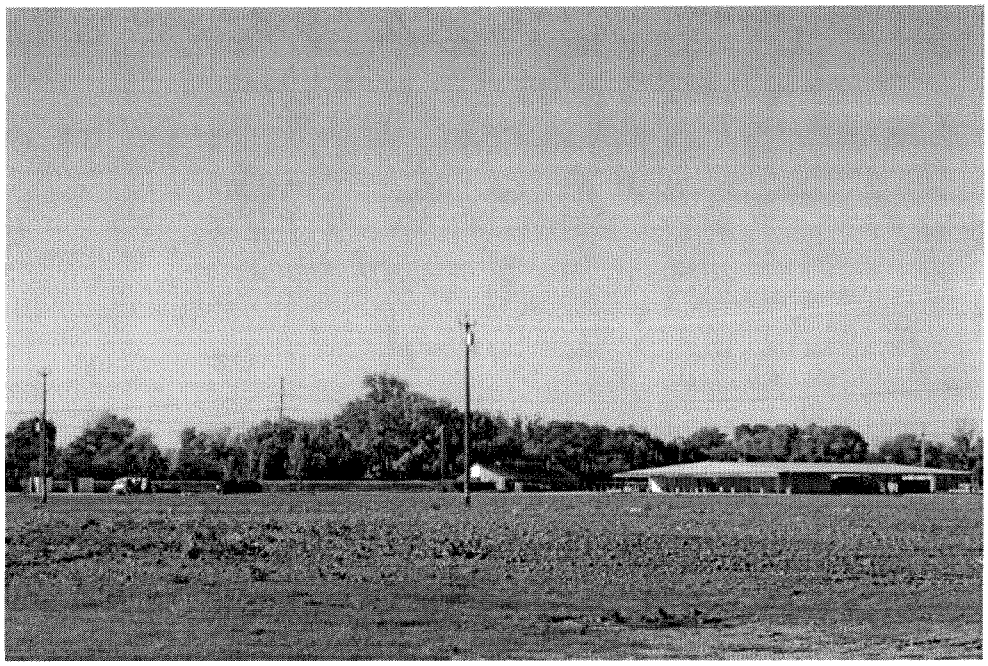

Photo 1: *View from North McCarthy Boulevard of existing agricultural buildings on project* ***site A*** *(the south parcel). The Coyote Creek levee and riparian vegetation behind the levee are visible at the rear of the property.*

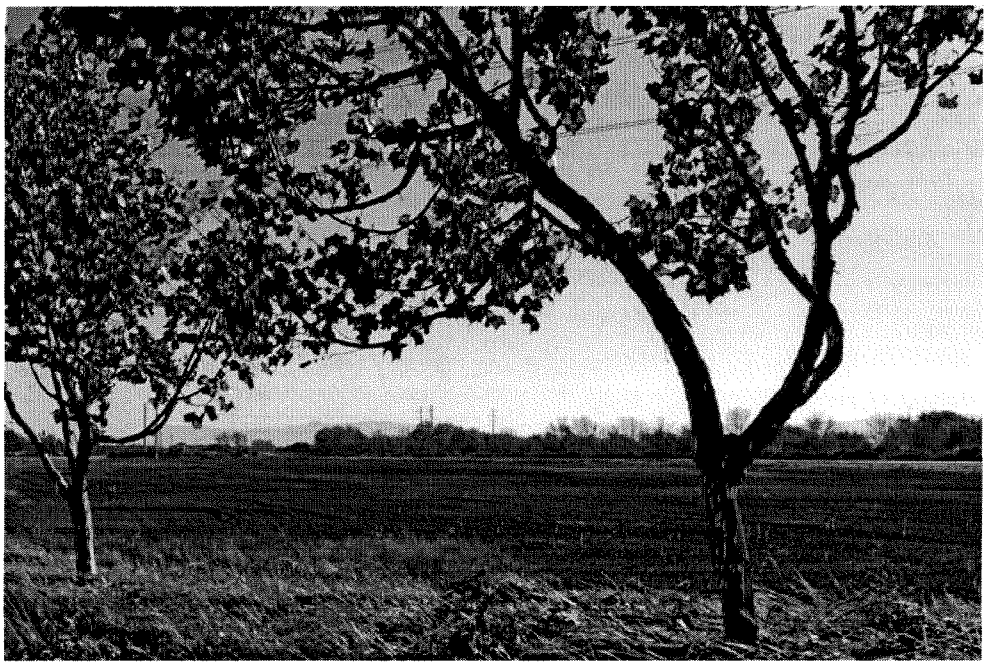

Photo 2: *View from North McCarthy Boulevard of cultivated land on project* ***site B*** *(the middle parcel). The Coyote Creek levee and riparian vegetation are visible in background along west edge of the property.*

Photo 3: *Another view from North McCarthy Boulevard of cultivated land on project* ***site A****. Riparian vegetation and the Coyote Creek levee are visible at the rear of the property.*

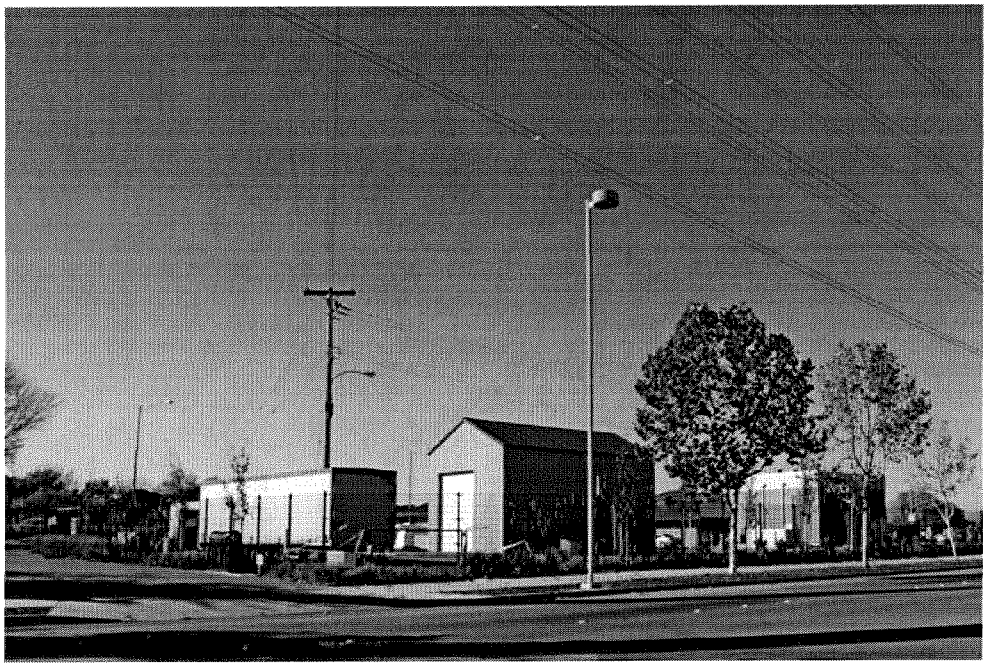

Photo 4: *View from North McCarthy Boulevard of the existing sewer lift station facility between project sites B and C.*

Table 11.1
ANTICIPATED CUMULATIVE FUTURE ADDITIONAL DEVELOPMENT IN MILPITAS AND SOUTHERN FREMONT

Development/Location	Status	SFR (units)	MFR (units)	Retail/ Comm. (sq. ft.)	Office/ R&D/ Industrial (sq. ft.)
City of Milpitas:					
Alexan/1556 S. Main St.	Approved		387		
Aspen Family/1666 S. Main St.	Under Construction		101		
Fairfield Murphy Ranch/Murphy Ranch Road	Approved		659		
Centria/1000 Great Mall Pkwy.	East Building Completed		464		
Matteson/S. Main St. at S. Abel St.	Approved		126		
Paragon/1696 S. Main St. and 75 Montague Expwy.	Under Construction		147		
Town Center Villas/E. Calaveras Blvd. at N.Milpitas Blvd.	Under Construction		65		
Landmark Towers/600 Barber Ln.	Approved		375	100,465	36,530
Mixed-Use Project/1880 N. Milpitas Blvd.	Approved		3	13,040	
Sinclair Renaissance/253 Sinclair Frontage Rd.	Approved	80			
South Bay Honda/920 Thompson St.	Under Construction			47,000	
Equity Office Campus/115-245 N. McCarthy Blvd.	In Process				424,814
Integral/McCandless at Great Mall Pkwy..	In Process		1,573	90,000	
Milpitas Station/Milpitas Blvd. near Montague Expwy.	In Process		318		

Development/Location	Status	SFR (units)	MFR (units)	Retail/ Comm. (sq. ft.)	Office/ R&D/ Industrial (sq. ft.)
Piper Towers/Piper Dr. near Montague Expwy.	In Process		480		
Citation/Piper Dr. near Montague Expwy.	In Process		638		
Milpitas Square/Barber Ln. at Bellew	In Process		900	175,000 [b]	
Milpitas Childcare Center/1312 S. Main St.	In Process			5,374	
Market Place/1535 Landess Ave.	In Process			89,704 [a]	
SUBTOTALS:		80	6,236	430,583	551,344
Proposed Project	In Process			122,060	1,071,470
TOTALS--MILPITAS		80	6,236	552,643	1,622,814

Southern Fremont:

The following recently approved and pending development projects are located in southern Fremont, generally between Dixon Landing Road and Mission Boulevard, east of Warm Springs Boulevard:

Nadev Printing, 47422 Kato Rd.	Under Construction				335,660
Bayside Market Place, south terminus of Fremont Boulevard (#6 on Figure 11.1)	In Process			524,000	
Robson Homes, 48835 Kato Road	Under Construction		114		
KB Home Development, 48921 Warm Springs Blvd.	Under Construction	142	200		
Fremont Time Square Shopping Center, 46408 Warm Springs Blvd.	Under Construction			93,511	
Solyundra Project, 47422 Kato Rd.	In Process				609,000

Development/Location	Status	SFR (units)	MFR (units)	Retail/ Comm. (sq. ft.)	Office/ R&D/ Industrial (sq. ft.)
Fremont Tech Center Phase 1, 2703 Lakeview Ct. (#8 on Figure 11.1)	Completed, not yet fully occupied				136,734
Fremont Tech Center Phase 2, Lakeview Dr. south of Phase 1 (#9 on Figure 11.1)	Approved				76,584
TOTALS--SOUTH FREMONT		142	314	617,511	1,157,978

SOURCE: City of Milpitas Planning Division and Fremont Community Development Department, October 2008.

Notes:

[a] Conversion of commercial building to retail center.
[b] Redevelopment of Commercial center into a mixed use site.

Legend: sq. ft. = square feet; SFR = single-family residential; MFR = multi-family residential; Comm. = commercial; R&D = research and development.

(b) Fremont. The following recent and pending developments in southern Fremont are located in the project vicinity on the west side of I-880 north of Dixon Landing Road:[1]

- the proposed approximately 524,000-square-foot Bayside Market Place Shopping Center project, located between Dixon Landing Road and the existing south terminus of Fremont Boulevard (location 6 on Figure 11.1), which is currently pending in the City of Fremont (projected occupancy: 2010);

- the approximately 76,548-square-foot Fremont Tech Center Phase 2 light industrial project on Lakeview Drive off of Fremont Boulevard (location 7 on Figure 11.2), which has been recently approved but not yet constructed; and

- the approximately 136,730-square-foot Fremont Tech Center Phase 1 R&D and light industrial project also on Lakeview Drive off of Fremont Boulevard, which has been recently constructed and is not yet fully occupied.

Other additional development is also expected to occur over time elsewhere in Fremont and in other neighboring communities (e.g., Newark, Union City, San Jose, Santa Clara, Mountain View, and Palo Alto, and other incorporated and unincorporated Santa Clara County and Alameda County areas). The potential cumulative environmental impacts of such regional development, in combination with the anticipated future cumulative development in Milpitas listed in Table 4.1, are evaluated in this EIR. The following chapters of this EIR include discussion of such potential cumulative, regional impacts: Air Quality (chapter 5), Biological Resources (chapter 6), Hydrology and Water Quality (chapter 10), Noise (chapter 12), and Transportation and Circulation (chapter 14).

11.2 PERTINENT PLANS AND POLICIES

11.2.1 Milpitas General Plan

(a) Milpitas General Plan Land Use Designations. As shown on Figure 11.2, the Milpitas General Plan designates project sites A and B for *Industrial Park* use and project site C for *Manufacturing and Warehousing* use. In areas designated *Industrial Park*, the General Plan allows "research, professional, packaging, and distribution facilities in a park-like setting, free from noise, odor and other such nuisances." In areas designated *Manufacturing and Warehousing*, the General Plan allows "a variety of light and heavy industrial activities, such as manufacturing, packaging, processing, warehousing and distribution, and ancillary support uses."[2]

As shown on Figure 11.2, the General Plan designates lands to the west of the project sites as *Parks and Open Space*, and lands to the east of the project sites as *General Commercial* and *Manufacturing and Warehousing*.

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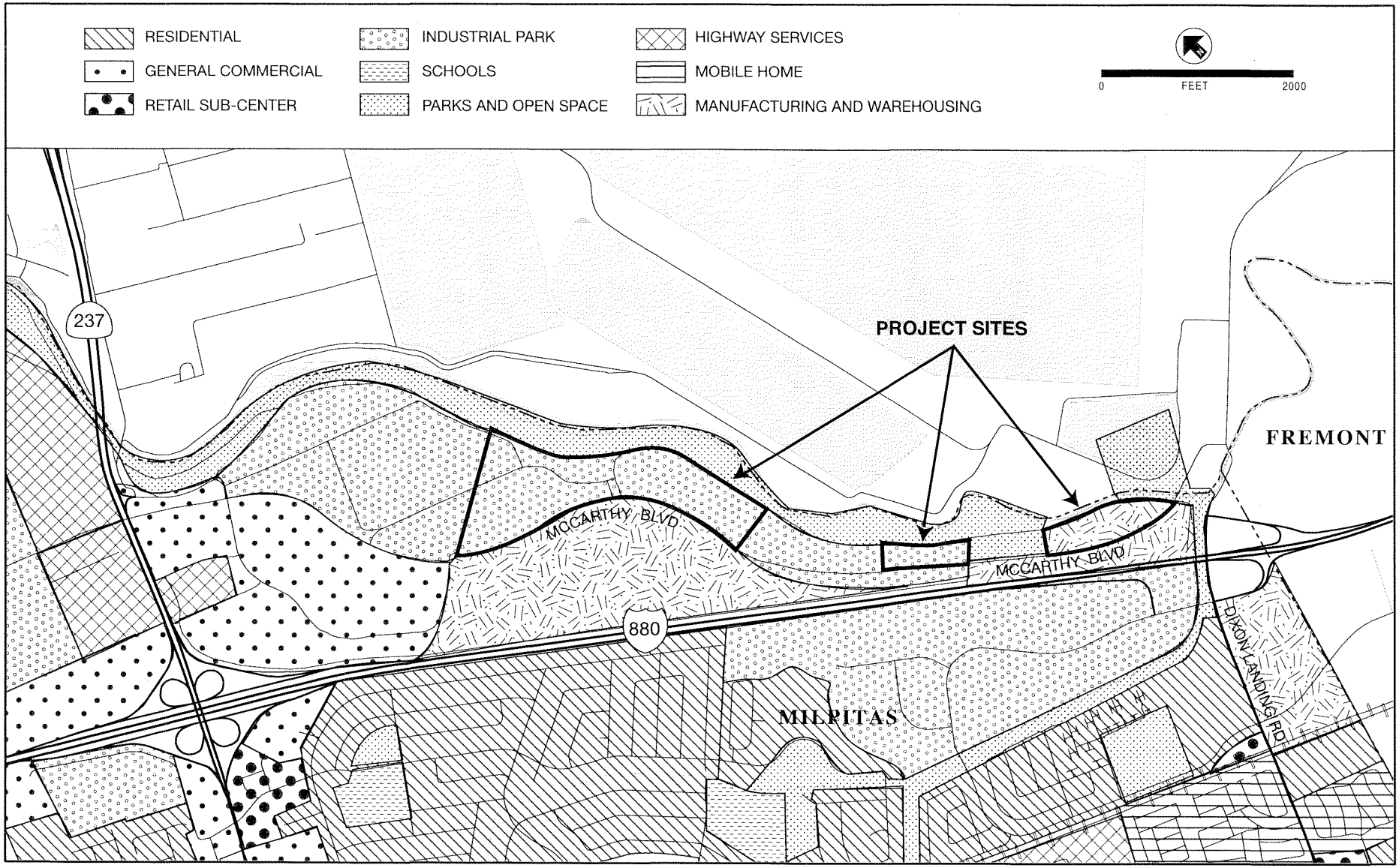
[1]October 28, 2008 letter from Kelley Diekmann, Senior Planner, City of Fremont, to Sheldon Ah Sing, City of Milpitas.

[2]City of Milpitas, Milpitas General Plan *Land Use Element*, page 2-14.



SOURCE: McCarthy Ranch LP

Figure 12.2
EXISTING MILPITAS GENERAL PLAN MAP DESIGNATIONS FOR THE PROJECT VICINITY

(b) Milpitas General Plan Principles and Policies. The Milpitas General Plan *Land Use Element* (adopted in 2002) contains the following principles and policies relevant to consideration of the land use impacts of the proposed project:

- *Maintain a land use program that balances Milpitas' regional and local roles by providing for a highly amenable community environment and a thriving regional industrial center.* (Principle 2.a-G-1, page 2-25)
- *Maintain a relatively compact urban form.* (Principle 2.a-G-2, page 2-25)
- *New developments should not exceed the building intensity limits established in the General Plan.* (Policy 2.a-I-1, page 2-26)
- *Promote development within the incorporated limits which acts to fill in the urban fabric rather than providing costly expansion of urban services into outlying areas.* (Policy 2.a-I-2, page 2-26)
- *Encourage economic pursuits which will strengthen and promote development through stability and balance.* (Policy 2.a-I-3, page 2-30)
- *Maintain policies that promote a strong economy which provides economic opportunities for all Milpitas residents within existing environmental, social, fiscal and land use constraints.* (Policy 2-a-I-5, page 2-30)

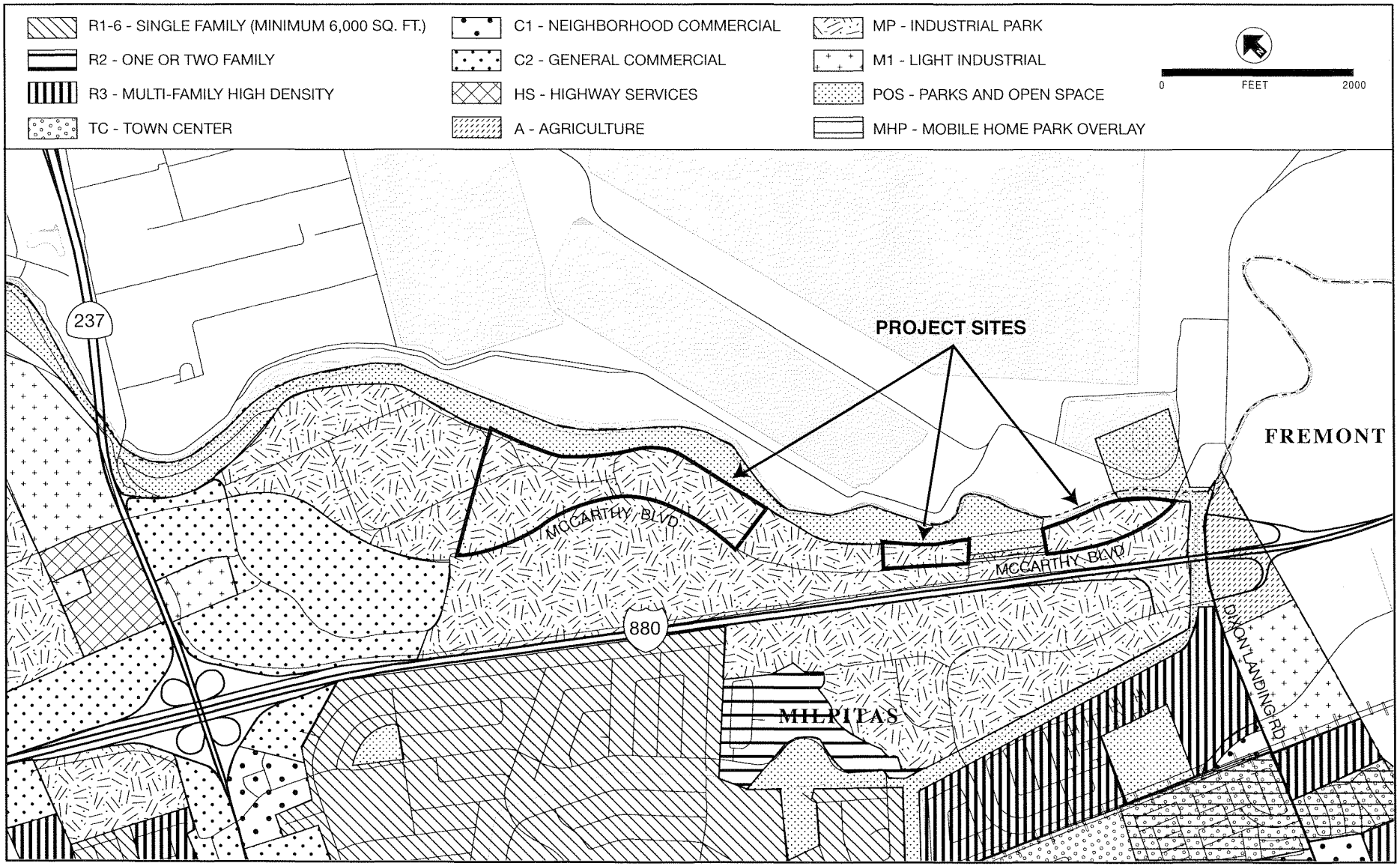
11.2.2 Milpitas Zoning Regulations

As shown on Figure 11.3, the City of Milpitas has zoned the project sites (sites A, B, and C) as *Industrial Park* (MP). The MP zoning district designation allows various industrial uses, as well as professional offices and public utility buildings, at a maximum floor area ratio (FAR) of 0.50.

Lands to the west of the project sites are zoned *Parks and Open Space* (POS). Lands to the east are zoned *General Commercial* (C2) and *Industrial Park* (MP). The C2 zoning allows a maximum FAR of 0.50.

11.2.3 Regional Plans

(a) ABAG's Regional Land Use Policy Framework. The most recent regional land use policy document by the Association of Bay Area Governments (ABAG) is entitled A Proposed Land Use Policy Framework for the San Francisco Bay Area, adopted by the ABAG Executive Board in July 1990. The document is described as a regional policy framework for future land use decisions in the Bay Area that respects the need for strong local control, but that also recognizes the importance of regional comprehensive planning for issues of regional significance. The document contains policies that (1) direct growth where regional infrastructure (e.g., freeways, transit, water, solid waste disposal, sewage treatment) is available and natural resources will not be overburdened; (2) encourage development that discourages long-distance commuting; (3) call for the establishment of firm growth boundaries; and (4) encourage provision of housing at all levels.



SOURCE: McCarthy Ranch LP

Figure 12.3
EXISTING MILPITAS ZONING MAP DESIGNATIONS FOR THE PROJECT VICINITY

(b) ABAG's San Francisco Bay Trail Plan. The paved Coyote Creek Trail, which extends along the top of the levee immediately west of the project sites, is a segment of the ABAG-planned San Francisco Bay Trail. ABAG's San Francisco Bay Trail Plan shows the Coyote Creek Trail connecting to planned Bay Trail extensions to the north and south.[1]

11.3 IMPACTS AND MITIGATION MEASURES

11.3.1 Significance Criteria

Based on the CEQA Guidelines, the project would be considered in this EIR to have a significant land use (or agricultural resource) impact if it would:[2]

(a) physically divide an established community;

(b) conflict with any applicable land use plan, policy, or regulation of the City of Milpitas (including, but not limited to, the Milpitas General Plan and Zoning Ordinance) or the Association of Bay Area Governments (ABAG), adopted for the purpose of avoiding or mitigating an environmental effect;

(c) conflict with any applicable habitat conservation plan or natural community conservation plan;

(d) 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;

(e) conflict with existing zoning for agricultural use, or a Williamson Act contract; or

(f) involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

11.3.2 Project-Proposed Land Use Changes

(a) Background. The project sites and surrounding McCarthy Ranch Master Plan area have been designated for urban use for over four decades. The approximately 421-acre portion of the Ranch property bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road has been designated by the City of Milpitas for urban use ("Urban Reserve Area") since the early 1960s and for a mixture of industrial park and manufacturing uses since the early 1970s.[3]

In 1986, the City annexed the approximately 421-acre portion of the McCarthy Ranch area bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road and approved

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[1]See http://www.abag.ca.gov/bayarea/baytrail/maps/South_Bay.pdf.

[2]CEQA Guidelines, Appendix G, items II(a-c) and IX(a-c); and sections 15064(b and d) and 15125(d).

[3]City of Milpitas, *Draft Environmental Impact Report for the McCarthy Ranch General Plan Amendment*, June 28, 1996 (SCN 94073003); page 2-4.

an *Industrial Park and Manufacturing* General Plan designation, MP (Industrial Park) zoning designation and associated McCarthy Ranch Master Plan for development of the area, establishing a maximum permitted FAR of 0.50.

In 1993, the City approved a GPA, rezoning and tentative map for the southern portion of the 1986 annexation, permitting development of the McCarthy Ranch Marketplace project.

In 1997, the City approved a GPA establishing a new Mixed Use (MX) designation and associated rezoning, updated McCarthy Ranch Master Plan and Design Guidelines submittal, and development agreement, that together specified an updated, mixed use development program for the approximately 203-acre undeveloped remainder of the McCarthy Ranch annexation area (Master Plan area).

As a result of subsequent legal action undertaken by the City of San Jose, Santa Clara Audubon Society, and others, a 1998 settlement agreement called for re-designation of the McCarthy Ranch Master Plan area back to Industrial Park and Manufacturing and provided that the City of San Jose would not object to subsequent development of non-residential uses provided that such development did not exceed a floor area ratio (FAR) of 0.35.

The most recent 1999 General Plan Amendment and related actions, which responded to the 1997 settlement agreement, established the current land use designations and a maximum permitted FAR of 0.50, with an accompanying Supplemental Environmental Impact Report (SEIR) that stipulated that any proposed increase in FAR beyond 0.35 "would require additional environmental review."

11.3.3 Impacts and Mitigation Measures

The project proposes to (1) amend the Milpitas General Plan to change the land use designation for project site C from *Manufacturing and Warehousing* to *General Commercial*, and (2) rezone site C from *Industrial Park* (MP) to *General Commercial* (C2).

Physical Relationship to Established Community. The proposed project would not physically divide an established community (see criterion [a] under subsection 11.3.1, Significance Criteria, above), but rather would facilitate infill with compatible land uses within the City's municipal boundary. The proposed office park uses of project sites A and B and community commercial use of site C would be consistent and compatible with existing and proposed adjacent and nearby industrial park, office, and general commercial uses. The proposed project urban uses, like other existing urban uses along North McCarthy Boulevard, would be distinctly separated and buffered from existing sludge lagoon, drying beds, and cultivated agricultural areas to the west by the Coyote Creek levee and open space corridor, and from existing general commercial, single-family residential, and industrial park land uses to the west by the I-880 freeway. As a result, project impacts on established community land use characteristics would be ***less-than-significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

Consistency with Applicable Land Use Plans, Policies, and Regulations. The project-proposed General Plan Amendment and rezoning, along with the resulting development of office park and commercial uses on the project sites, would not conflict with applicable local or

regional land use plans, policies, or regulations (see criterion [b] under subsection 11.3.1, Significance Criteria, above). The proposed office park use of sites A and B would be consistent with the existing Milpitas General Plan *Industrial Park* designation and Milpitas Zoning Ordinance *Industrial Park* (MP) district designation for the two sites. The proposed General Plan Amendment and rezoning and resulting general commercial use of site C would not produce any conflicts with applicable land use plans, policies or regulations. In general, the project would further Milpitas General Plan policies that call for economic development and urban infill within the city limits.

The existing *Industrial Park* (MP) zoning for sites A and B and the proposed *General Commercial* (C2) zoning for site C allow a maximum FAR of 0.50. The proposed development of the three sites up to a maximum FAR of 0.50 would therefore also be consistent with applicable land use plans, policies and regulations. The environmental impacts of this level of development (i.e., development that exceeds the 0.35 FAR stipulated in the 1997 settlement agreement) are fully addressed in this EIR (including this Land Use and Agriculture chapter and chapter 4, Aesthetics; chapter 5, Air Quality; chapter 12, Noise; chapter 13, Public Services, Utilities and Service Systems; and chapter 14, Transportation and Circulation).

In general, the proposed office park and community shopping center use of the project sites would be compatible with the research and development, office, light industrial, general commercial, and sanitary sewer pump facility land uses that adjoin or are opposite the sites along North McCarthy Boulevard. No habitat conservation plans or natural community conservation plans apply to the project sites. The project would not be expected to result in land use conflicts with the Santa Clara Valley Water District-owned Coyote Creek open space and flood control corridor that adjoins the west edge of the project sites, particularly since a 6- to 10-foot-high levee separates the three project sites from the creek corridor. The project would not affect the paved Coyote Creek Trail located at the top of the levee.

The project would also be consistent with ABAG's Regional Land Use Policy Framework. As an "infill" project within an existing urban area where services are currently available, the project would be compatible with regional land use policies.

Based on these considerations, the project would have a ***less-than-significant impact*** in relation to applicable land use plans, policies and regulations.

Mitigation. No significant impact has been identified; no mitigation is required.

Agricultural Resources Impacts. The proposed office and community shopping center uses would displace existing interim agricultural activities, including existing cultivated row crops on all three sites and the existing produce storage and packing facility and associated worker housing on site A. The three project sites, as well as all other developed and undeveloped lands in the McCarthy Ranch Master Plan area, are part of an extensive group of lands west of I-880 and primarily west of Coyote Creek designated on the California Resources Agency-prepared Farmland Mapping and Monitoring Program map of the area as Prime Farmland, i.e., "land which has the best combination of physical and chemical characteristics for the production of crops."

The project area has been designated for conversion to non-residential urban use for over four decades. The Milpitas General Plan and Zoning Ordinance have designated the portion of this

area within the Milpitas city limits for urban use since the early 1960s. The Milpitas General Plan and General Plan EIR acknowledge that these urban designations have resulted in the loss of important farmlands. The project would not be expected to result in the conversion of additional farmland in the area to non-agricultural use. These designated non-residential urban areas west of I-880, including the three project sites, are adequately separated and buffered from the more extensive areas of "Prime Farmland" to the west by the Coyote Creek levee and open space corridor.

None of the three project sites are subject to an existing Williamson Act Contract.

Based on these considerations, the proposed project--i.e., the proposed GPA and rezoning and associated future office and general commercial land uses, would result in a ***less-than-significant*** impact on agricultural resources.

Mitigation. No significant impact has been identified; no mitigation is required.

Cumulative Land Use Impacts. The proposed project, in combination with other development in the vicinity and elsewhere in Milpitas (see Table 11.1 herein), is consistent with local and regional land use plans and policies. Cumulative environmental impacts associated with these particular impact categories are addressed in corresponding chapters of this EIR. Based on these considerations, the cumulative land use impacts of the proposed project together with the other pending and recently approved development listed in Table 11.1 are considered ***less-than-significant***.

Mitigation. No significant cumulative land use impact has been identified; no mitigation is required.

12. NOISE

Noise concerns typically raised by an office park and community shopping center development include compatibility with the existing noise environment, noise impacts from project-generated increases in traffic, long-term noise impacts from on-site project activity (mechanical equipment, etc.), and temporary construction-period noise impacts. The following chapter discusses the fundamentals of environmental acoustics; describes the existing noise setting and relevant standards, guidelines, and regulations; identifies related project impacts; and recommends measures warranted to mitigate identified significant noise impacts.

12.1 SETTING

12.1.1 Fundamentals of Acoustics

(a) Noise Quantification. Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. There are several noise measurement scales that are used to describe noise in a particular location. *A decibel (dB)* is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. A "decibel" and other acoustical terms are defined in Table 12.1.

(b) Common Noise Level Descriptors. There are several methods of characterizing sound. The most common in California is the *A-weighted sound level*, or *dBA*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are indicated in Table 12.2.

Because sound levels can vary markedly over a short period of time, environmental sounds are most commonly described in terms of an average level that has the same acoustical energy as the summation of all the time-varying noise events in the measurement period. This energy-equivalent sound/noise descriptor is called L_{eq}. The most common averaging noise quantification periods are hourly, eight hours, and daily (24 hours), but L_{eq} can describe any series of noise events of arbitrary duration.

(c) Human Sensitivity to Noise. Since human sensitivity to noise increases during the evening and at night--because excessive noise interferes with the ability to sleep--24-hour average noise level descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level, CNEL*, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 PM - 10:00 PM) and a 10 dB addition to nocturnal (10:00 PM - 7:00 AM) noise levels. The *Day/Night*

Table 12.1
DEFINITIONS OF ACOUSTICAL TERMS

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 PM to 10:00 PM and after addition of 10 decibels to sound levels in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level, L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 PM and 7:00 AM.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

SOURCE: Wagstaff and Associates, December 2008.

Table 12.2
TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

At a Given Distance from Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Impression
	140		
Civil Defense Siren (100')	130		
Jet Takeoff (200')	120		Pain Threshold
	110	Rock Music Concert	
Pile Driver (50')	100		Very Loud
Ambulance Siren (100')			
	90	Boiler Room	
Freight Cars (50')		Printing Press Plant	
Pneumatic Drill (50')	80	In Kitchen With Garbage Disposal Running	
Freeway (100')			
	70		Moderately Loud
Vacuum Cleaner (10')	60	Data Processing Center	
		Department Store	
Light Traffic (100')	50	Private Business Office	
Large Transformer (200')			
	40		Quiet
Soft Whisper (5')	30	Quiet Bedroom	
	20	Recording Studio	
	10		Threshold of Hearing
	0		

SOURCE: Wagstaff and Associates, December 2008.

Average Sound Level, DNL, is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period. The Milpitas General Plan *Noise Element* uses the DNL measure in describing existing and project noise levels in the community and in establishing associated standards, principals and policies.

12.1.2 Effects of Noise

(a) Hearing Loss. Hearing loss occurs mainly due to chronic exposure to excessive noise, but may also be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The state's Occupational Safety and Health Administration (OSHA) has established a noise exposure standard that represents the threshold where hearing loss may occur from long-term exposures. The OSHA-established maximum allowable noise level in the state is 85 dBA averaged over eight hours. If the noise is above 85 dBA, the allowable exposure time is correspondingly shorter.

(b) Sleep and Speech Interference. The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors, the thresholds are about 15 dBA higher.

With conventional steel-frame construction, structural noise attenuation is typically 12-to-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer structure. Speech interference is therefore possible when exterior noise levels are about 57-to-62 dBA L_{dn} with windows open and 65-to-70 dBA L_{dn} with windows closed.

Noise levels of 75-to-80 dBA are typical for the first row of development outside a freeway right-of-way. Noise levels of 65-to-70 dBA are typical for a primary/major arterial. Noise levels of 55-to-60 dBA are common along collector streets and secondary arterials.

12.1.3 Existing Noise Environment

The three non-contiguous project sites are located within a developing office, R&D and community shopping center area along North McCarthy Boulevard between SR 237/Calaveras Boulevard and Dixon Landing Road, within the McCarthy Ranch Master Plan area. The City of Milpitas General Plan and McCarthy Ranch Master Plan provide for development of the area with a mix of commercial, R&D and industrial park uses. Approximately 60 percent of the approximately 203-acre McCarthy Ranch Master Pan area has been built out.

Existing (ambient) and projected future noise conditions in the area have been described in the City's General Plan *Noise Element* (most recently amended in July 1997) and in the subsequent McCarthy Ranch General Plan Amendment EIR of 1996 (1996 EIR) and McCarthy Ranch General Plan Amendment SEIR of 1999 (1999 SEIR).

The nearest noise-sensitive urban land uses (e.g., residential, hospital, school, library, nursing home, etc.) are single-family and multi-family neighborhoods on the opposite side of I-880. These uses are well-separated from the project site by the freeway.

The existing noise environment in the project area and on the project site itself is influenced primarily by vehicular traffic on I-880, and, to a lesser extent, North Milpitas Boulevard. Other noise sources in the area include vehicular traffic on SR 237 and occasional aircraft flyovers. Based on measurement and projected noise contour information in the General Plan *Noise Element*, 1996 EIR, and 1999 SEIR, it is estimated that the three project sites are currently within the I-880-realted 60-to-70 dBA noise contour, and by the year 2010 would be within the I-880-related 63-to-75 dBA CNEL noise contour (1999 SEIR Table I3.G-1 and 1997 *Noise Element* Figure 6-1).

12.2 PERTINENT PLANS AND POLICIES

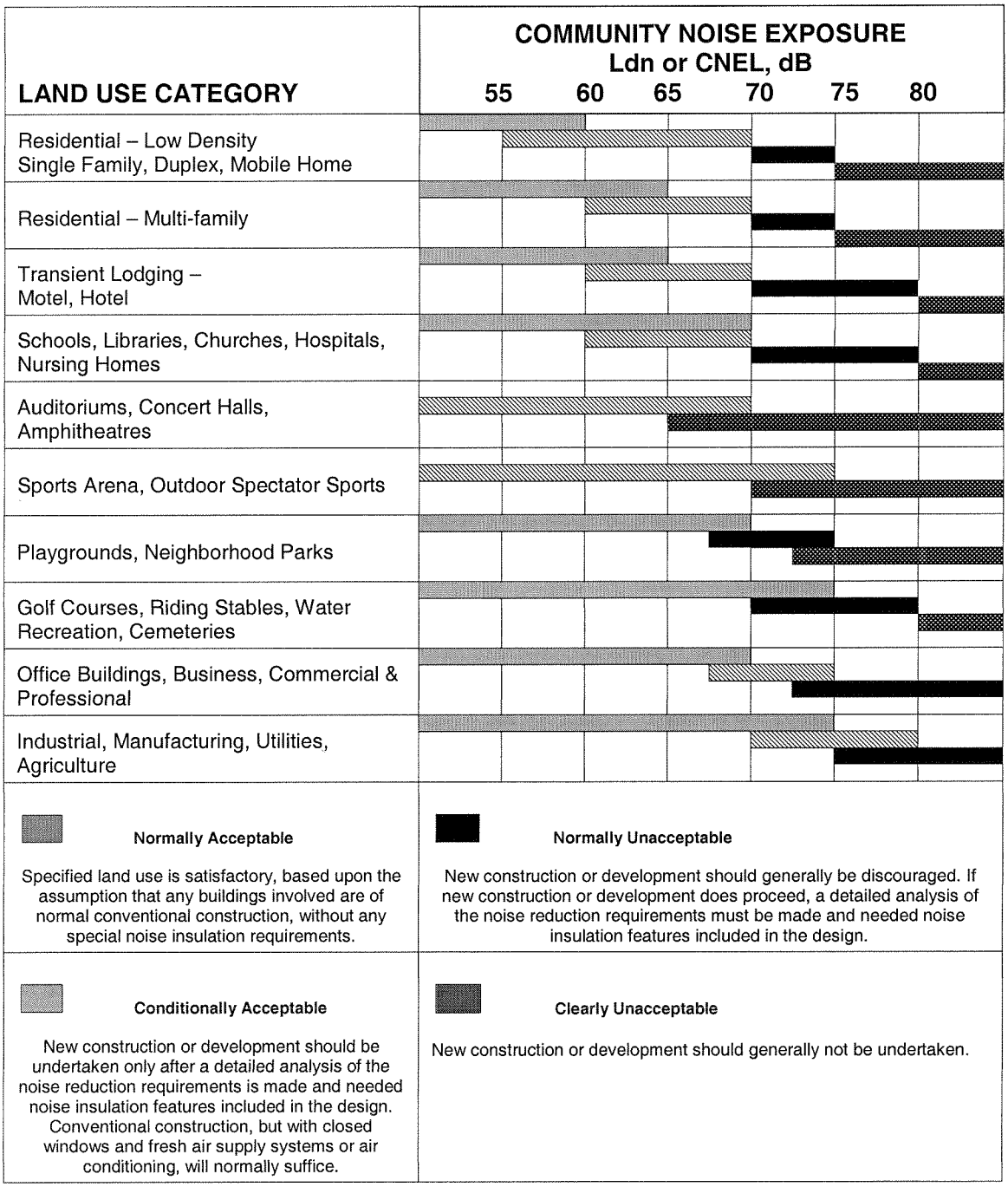
The State of California and the City have established regulations, plans, and policies designed to limit noise exposure at noise-sensitive land uses. Most importantly, these include Title 24 of the State of California Building Code and the Milpitas General Plan *Noise Element*.

12.2.1 Milpitas General Plan Noise Element

The Milpitas General Plan *Noise Element* (as amended in July 1997) identifies noise and land use compatibility standards and policies (criteria) derived from guidelines published by the California Office of Planning and Research, which are shown in Table 12.3. In addition, the following pertinent General Plan principles and implementing policies are listed in the *Noise Element*:

- *Maintain land use compatibility with noise levels similar to those set by State guidelines.* (Guiding Principle 6-G-1)
- *Minimize unnecessary, annoying, or injurious noise.* (Guiding Principle 6-G-2)
- *Use the guidelines in Table 6-1 (Noise and Land Use Compatibility) as review criteria for development projects.* (Implementing Policy 6-I-1)
- *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.* (Implementing Policy 6-I-2)
- *Prohibit new construction where the exterior noise exposure is considered "clearly unacceptable" for the use proposed.* (Implementing Policy 6-I-3)
- *Enforce the provisions of the City of Milpitas Noise Ordinance and the use of established truck routes.* (Implementing Policy 6-I-9)
- *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.* (Implementing Policy 6-I-10)

Table 12.3
STATE OF CALIFORNIA AND CITY OF MILPITAS NOISE GUIDELINES FOR LAND USE PLANNING



SOURCE: Wagstaff and Associates, December 2008, derived from Milpitas General Plan *Noise Element,* Table 6-1.

- *Minimize noise impacts on neighbors caused by commercial and industrial projects.* (Implementing Policy 6-I-11)

- *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."* (Implementing Policy 6-I-12)

- *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.* (Implementing Policy 6-I-10)

12.3 IMPACTS AND MITIGATION MEASURES

12.3.1 Significance Criteria

Based on the CEQA Guidelines, the proposed project would be considered in this EIR to have a significant noise impact if it would result in:[1]

(a) 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;

(b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or

(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

CEQA does not define what noise level increase would be considered "substantial" (see items c and d above). Typically, if the L_{dn} or CNEL resulting from the project would increase by 3 dBA or more at noise-sensitive receivers, a noise impact would be considered significant.

Specific to the proposed project, a significant noise impact would result if:

- Land uses proposed by the project would be exposed to noise levels exceeding the City's established guidelines for noise and land use compatibility (as listed in subsection 12.2.1 above);

[1]CEQA Guidelines, Appendix G, item XI(a-e).

- Adjacent land uses would be exposed to perceptible project-generated noise or vibration levels for an extended period of time;

- The project resulted in a noise level increase of 3 dBA or greater elsewhere at the location of an existing or planned noise-sensitive land use.

Construction period noise and vibration levels are treated somewhat differently because they are a short-term effect. For purposes of this EIR, a significant construction period noise or vibration impact would be determined if project construction activities were to interfere with speech or normal business activities at an adjacent or nearby use.

12.3.2 Impact and Mitigation Measures

Impact 12-1: Project Compatibility with Existing and Projected Noise Environment. Based on available City data on existing and projected noise levels in the project area, it is estimated that future project office park and community shopping center occupants on the two project sites closest to I-880--i.e., sites C and D--would be exposed to exterior noise levels of up to 70 to 75 dBA CNEL by 2010. The projected future noise level of 70 to 75 dBA CNEL would fall within the Milpitas General Plan *Noise Element* defined "Conditionally Acceptable" range, under which "New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the project design" (Milpitas General Plan *Noise Element* Table 6-1). Until such a detailed analysis of project noise reduction requirements for sites C and D is completed to City satisfaction, it is assumed that the project may result in a ***significant impact*** pertaining to projected land use/community noise environment compatibility [see criterion (a) section 12.3.1, "Significance Criteria," above].

Mitigation 12-1. In accordance with General Plan *Noise Element* Policy 6-I-X, project future applicant(s) shall conduct and submit a detailed analysis of noise reduction requirements and identification of associated site and architecture design noise reduction and insulation features to be included in the project design to City Planning Division satisfaction prior to City approval of detailed project site, architectural and landscape plans. Implementation of this measure would reduce this potential impact to a ***less-than-significant level***.

Project-Generated Off-Site Traffic Noise Increases. Project-generated net increases in traffic volumes on the local roadway network would slightly increase existing noise levels along the affected roadways. Based on a review of the project-generated local traffic increments identified for this EIR by Hexagon Transportation Consultants, Inc. (chapter 14), noise levels on the affected roadways near noise-sensitive land uses in the project vicinity (residential uses on the opposite side of I-880) would not increase by 3 dBA CNEL or more due to project buildout. Project-generated off-site traffic noise increases would therefore represent a ***less-than-significant impact***.

Mitigation. No significant impact has been identified; no mitigation is required.

Project Demolition and Construction Period Noise Ground-Borne Vibration Impacts. Project demolition and construction activities could generate substantial temporary noise and vibration in the project vicinity, especially during grading, foundation construction and installation of project infrastructure when heavy construction equipment is used. Construction activities can generate considerable amounts of noise, especially during the building demolition, grading and scraping, and infrastructure construction phases when heavy equipment is used. The noise effects of such demolition and construction activities would depend on the noise characteristics of selected pieces of construction equipment, the timing and duration of these noise generating activities, and the distance between these noise sources and the nearest noise-sensitive receptors. Noise levels during construction would occur in phases, including demolition of existing structures on the project site, grading and excavation, construction of foundations, erection of the new structures, and finishing. Tables 12.4 and 12.5 depict typical noise levels generated by construction equipment at a distance of 50 feet from the source and at a distance of 50 feet from the construction activity center, respectively. The highest maximum noise levels generated by project construction activities would typically range from approximately 90-to-105 dBA at a distance of 50 feet from the noise source. These noise levels would result primarily from pile drivers, jack hammers, and other percussive pieces of equipment.

Typical hourly average construction-generated noise levels would be approximately 81 dBA to 89 dBA measured at a distance of 50 feet from the center of the site during busy construction periods. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. Shielding by intervening buildings or terrain typically result in much lower construction noise levels at distant receptors.

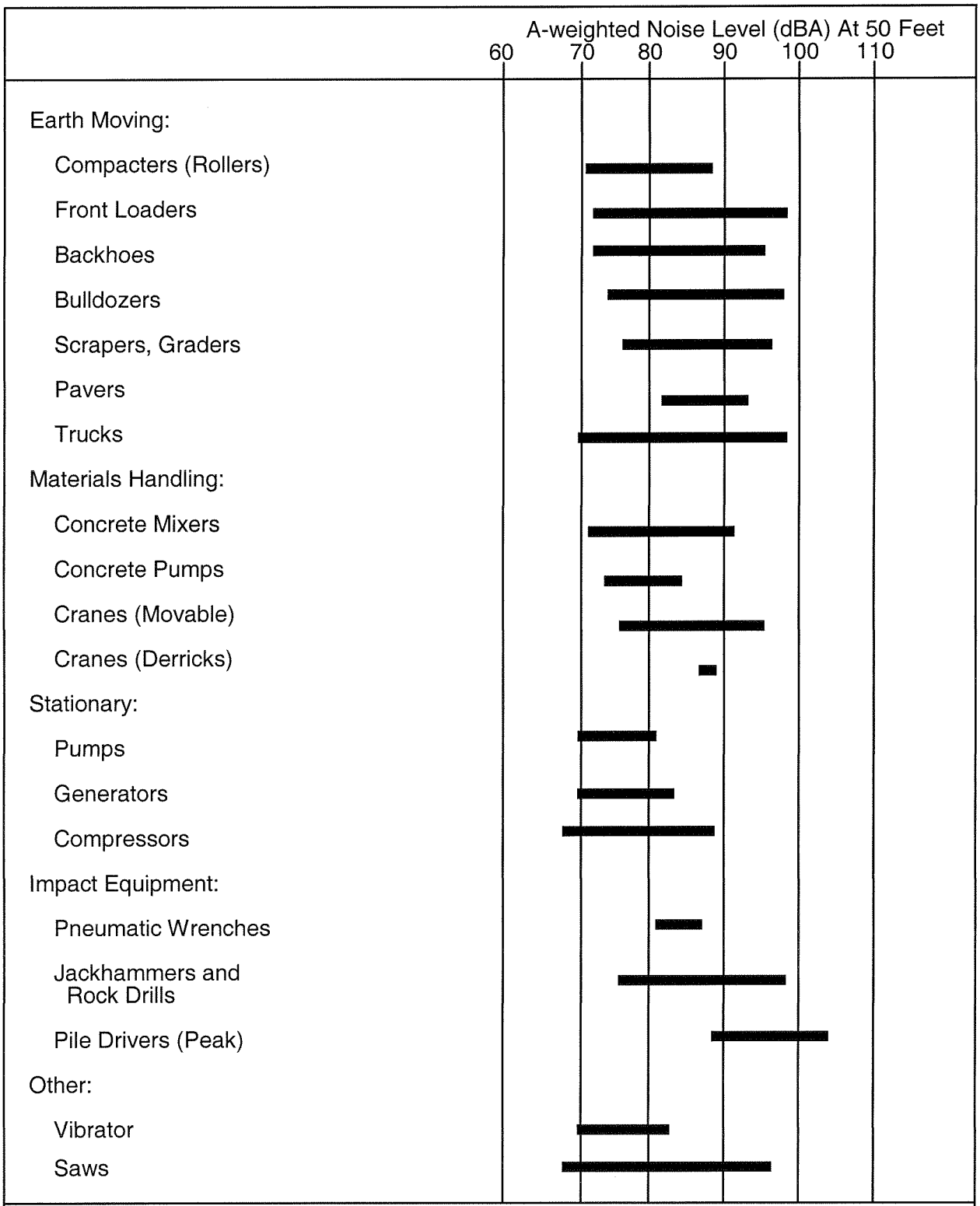
Construction noise impacts result primarily when construction activities occur during the noise-sensitive times of the day (i.e., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time. Limiting construction to daytime hours is often the most simple and effective method of reducing the potential for noise impacts. In areas immediately adjacent to construction, controls such as constructing temporary noise barriers and utilizing "quiet" construction equipment can also reduce the potential for noise impacts..

Project cconstruction sequencing would consist of demolition of existing structures (on site A), and other site preparation work, followed by scraping, earth-moving and filling to prepare each of the three sites, followed by foundation work, followed by new building erection.

Associated demolition and construction activities during project construction--such as use of building demolition equipment, jackhammers, rock drills, and other high-power or vibratory tools and rolling stock equipment (tracked vehicles, compactors, etc.)--could also potentially generate substantial vibration in the immediate project vicinity. Depending on the proximity of existing structures to the construction area and the methods of construction used, vibration levels may temporarily affect nearby properties.

Construction-induced vibration sufficient to be structurally damaging to a nearby building is very rare and has been observed only in instances where the structure is already in a high state of disrepair and when the construction activity occurs immediately adjacent to the structure.

Table 12.4
CONSTRUCTION EQUIPMENT NOISE LEVEL RANGES



Source: Handbook of Noise Control, Cyril M. Harris, 1979.

Table 12.5
TYPICAL NOISE LEVEL RANGES AT 50 FEET, L_{eq} IN dBA, AT CONSTRUCTION SITES

	Office Building, Hotel, Hospital, School, Public Works		Public Works, Roads and Highways, Sewers and Trenches	
	I	II	I	II
Ground Clearing	84	84	84	84
Excavation	89	79	88	78
Foundations	78	78	88	88
Erection	87	75	79	78
Finishing	89	75	84	84

SOURCE: U.S. EPA, Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.

Vibration levels resulting from project demolition and construction activities, when perceptible at nearby properties, would be intermittent and of short duration, especially for those construction operations that have the highest potential for producing noise and vibration (building demolition, grading and scraping, pile driving, and use of jackhammers, heavy equipment, and other high power tools).

There are no known noise-sensitive uses (single- or multi-family residential, commercial lodging, schools, libraries, churches, hospitals, nursing homes, etc.) in the immediate project vicinity. The City imposes limits on the timing of construction activity to between the hours of 7:00 AM and 7:00 PM Monday through Saturday and prohibits such activity on selected holidays and requires individual project implementation of standard noise suppression techniques. Based on these factors, project construction period temporary noise and ground-borne vibration impacts would be ***less-than-significant***.

Mitigation. No significant impact has been identified; no mitigation is required.

Cumulative Noise Impacts. Based on existing and projected cumulative traffic volumes identified in chapter 12 (Transportation and Circulation) of this EIR, future cumulative traffic-related noise level increases in Milpitas with the project would be substantially less than 3 dBA

higher than cumulative noise levels without the project. The project-related contribution to future cumulative increases in community ambient noise levels (CNEL) would be imperceptible to the human ear and therefore ***less-than-significant cumulative impact***.

Mitigation. No significant impact has been identified; no mitigation is required.

13. PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

This EIR chapter describes existing water, sewer, police, fire protection/emergency medical, and solid waste service conditions in the project vicinity, identifies project-related environmental impacts associated with these services, and recommends mitigation measures for identified potentially significant environmental impacts.

13.1 WATER

The water service impacts evaluation in this section relies upon a technical document prepared specifically for the proposed project: the McCarthy Ranch Mixed-Use Project Water Supply Assessment (WSA). The water supply assessment was prepared by the City of Milpitas Public Works Department and approved by the Milpitas City Council on October 21, 2008, pursuant to State Senate Bill 610 (SB 610--Costa)[1] and the California Environmental Quality Act (CEQA). The WSA analysis is in turn based on the City's 2005 Urban Water Management Plan (UWMP), the Santa Clara Valley Water District (SCVWD) 2005 UWMP, and the City's 2002 Water Master Plan.[2] The full text of the City-prepared WSA is included as an appendix to this EIR (appendix 20.2). The City's 2005 UWMP, SCVWD's 2005 UWMP, and the City's 2002 Water Master Plan are available for review at the City of Milpitas Planning Division, 455 East Calaveras Boulevard, Milpitas, CA.

13.1.1 Setting

(a) Existing and Projected Water Supply. The City of Milpitas provides water service in the project area. Currently, sources of domestic water used in Milpitas include the San Francisco Public Utilities Commission (SFPUC), which provides about 65 percent of the city's potable water, and the Santa Clara Valley Water District (SCVWD). The City also purchases recycled water from the South Bay Water Recycling Program, which has developed a reclaimed water system to use treated wastewater from the San Jose/Santa Clara Water Pollution Control Plant for irrigation and industrial purposes.[3] The SFPUC and SCVWD are expected to supply all potable water over the next 30 years, with no new water sources added. However, two wells will be available for emergency and supplemental purposes as necessary.[4]

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[1]SB 610 (Costa) was enacted by the California Legislature in 2001 to achieve greater coordination during the land use planning and CEQA processes between water suppliers and local land use agencies when considering certain large-scale development projects. See a further description of SB 610 subsection 13.1.4 herein.

[2]The City is in the process of preparing an update of the 2002 Water Master Plan.

[3]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 93.

[4]City of Milpitas, McCarthy Ranch Mixed-Use Project Water Supply Assessment, approved by the Milpitas City Council on October 21, 2008, page 2; included in this EIR as Appendix 20.2.

The project sites are located within the SCVWD service area. SCVWD's water supply comes from a variety of sources, including local surface water and groundwater aquifers, as well as water imported from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. Water purchased from SCVWD is governed by a contract between SCVWD and the City. The actual contract amount is adjusted periodically based on an annual delivery schedule the City submits triennially. This schedule is binding for the subsequent three-year period.

Between 1996 and 2008, the City's water purchases from SCVWD ranged from a high of 5.06 million gallons per day (mgd) in 1996/1997 to a low of 3.53 mgd in 2004/2005. The downward trend in water purchases is attributed to conservation efforts, conversion from potable water irrigation to recycled water irrigation, and economic factors. Projected water supply from SCVWD is estimated at 5.78 mgd in 2009/2010 and is expected to increase to 6.37 mgd in 2014/2015, 6.63 mgd in 2019/2020, 6.88 mgd in 2024/2025, and 7.13 mgd in 2029/2030. These projections are expected to meet normal year water demand. According to SCVWD's UWMP, SCVWD's supply is anticipated to meet future countywide demands during normal, single-dry, and multiple-dry water years. Water demand estimates include an average unaccounted for water loss of 6.1 percent.[1]

(b) Existing Water Delivery System. The City of Milpitas Public Works Department is responsible for operating the existing local water distribution system in Milpitas. The municipal water system serving the project vicinity includes 14-inch domestic and 10-inch recycled water mains extending under North McCarthy Boulevard, which adjoins the project sites.

13.1.2 Pertinent Plans and Policies

The Milpitas General Plan *Land Use Element* (adopted in 2002) contains the following principle and policy relevant to consideration of the water service impacts of the proposed project:

- *Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.* (Principle 2.d-G-1, page 2-37)

- *Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.* (Policy 2.d-I-1, page 2-37)

In addition, Section 64562 of the California Health and Safety Code requires all public water systems to have sufficient water available from their water sources and distribution reservoirs to supply adequately, dependably, and safely the total requirements of all users under maximum demand conditions before agreement is made to permit additional service connections to a system.

[1]City of Milpitas, McCarthy Ranch Mixed-Use Project Water Supply Assessment, approved by the Milpitas City Council on October 21, 2008 (included in Appendix 20.2 of this EIR), pages 3-4 and page 6.

13.1.3 Significance Criteria

Based on the CEQA Guidelines, the project would be described in this EIR as having a significant environmental impact related to water service if it would:[1]

(a) require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

(b) result in the need for new or expanded water supply entitlements; or

(c) result in a public service condition that is inconsistent with any applicable land use plan, policy, or regulation of an agency that has jurisdiction over the project, including California Health and Safety Code provisions and Milpitas General Plan provisions.

13.1.4 Impacts and Mitigation Measures

Project-Related and Cumulative Water Demand. The project would increase the demand for municipal water service in the project vicinity. The WSA prepared for the project, and included in this EIR as Appendix 20.2, concludes that there would be sufficient water supply to provide service to the project. The project would be required to include standard water conservation and recycling features. The project therefore would not require new or expanded water facilities or water supply entitlements, and would not conflict with applicable state and local planning provisions for water service. The project's water supply impact would therefore be ***less than significant.***

Water Supply Assessment. State legislation, SB 610, requires preparation of a Water Supply Assessment (WSA) for any development whose approval is subject to CEQA and that meets the definition of "project" under Water Code section 10913(b), i.e., a residential development project of more than 500 dwelling units or other types of development (e.g., commercial buildings, industrial parks, hotels) expected to use a comparable amount of water. The McCarthy Ranch Mixed Use Project is subject to CEQA (as evidenced by this EIR) and meets the Water Code criteria for requiring a WSA.

Under SB 610, the WSA must describe the proposed project's water demand over a 20-year period, identify the sources of water available to meet that demand, and include an assessment of whether those water supplies are or will be sufficient to meet the demand for water associated with the proposed project, in addition to the demand of existing customers and other planned future development. If the assessment concludes that water supplies are or will be insufficient, then the assessment must describe plans (if any) for acquiring additional water supplies, and the measures that are being undertaken to acquire and develop those supplies.

Accordingly, as indicated previously, a WSA has been prepared by the City for the McCarthy Ranch project. The WSA (report) is included in Appendix 20.2 of this EIR. The WSA findings are summarized below.

Project Water Demand. The WSA estimates that the project could generate a demand for approximately 83,916 gallons per day (gpd), or 10,741 gpd more than the 73,175 gpd assumed for the project area in the City's Urban Water Management Plan (UWMP). Adjusting for an

[1]CEQA Guidelines, Appendix G, items XVI(b), XVI(d), and IX(b).

additional 6.1-percent demand due to unaccounted water, the project would require an additional supply of 8,740 gpd (or 9.8 acre-feet per year) (see note below). The net increase in water demand would be due to the project-proposed change in site C land use from industrial to commercial. The WSA concludes that the minor increase in water demand over previous estimates for the project sites is within the range of error for previous estimates, and that there would be sufficient water supply to provide service to the project.[1]

Note: The City's October 21, 2008 WSA (see Appendix 20.3 of this EIR) identified a net increase in water demand of 11,396 gpd (or 12.8 acre-feet per year) for the site C commercial use, assuming an FAR of 0.30--i.e., 122,060 square feet of floor area for the 9.34-acre site, as indicated in the September 2008 Notice of Preparation for this EIR (see Appendix 20.1, page 3). The latest project proposal includes a reduced FAR of 0.23 for site C, resulting in a net increase in water demand of about 8,740 gpd (or 9.8 acre-feet per year).

(c) Water Conservation Requirements. The WSA notes that, to reduce potable water demand, the City would require that the project (1) incorporate water conservation practices to the maximum extent practicable in accordance with City policies, and (2) use recycled water to the maximum extent practicable. Recycled water would be required for landscape irrigation and toilet/urinal flushing in accordance with City policy. In addition, recycled water would be required for cooling towers (if used), if determined feasible by the City.[2]

Mitigation. No significant impact has been identified; no mitigation is required.

13.2 WASTEWATER

13.2.1 Setting

(a) Existing Sewage Treatment System. Wastewater from Milpitas is treated at the San Jose/Santa Clara Water Pollution Control Plant, located east of Coyote Creek (see locations #10, 11 and 12 on Figure 11.1, Land Uses in the Project Vicinity, herein). In 2001, the City discharged 9.0 million gallons per day (mgd) of wastewater and was contractually limited to a flow of 12.5 mgd. In July 2006, the City purchased an additional one million gallons per day of capacity at the treatment plant. This purchase increased the City's treatment capacity to 13.5 mgd (i.e., the City is now contractually allowed a sanitary sewer flow of 13.5 mgd).[3]

The treatment plant has a dry-weather total capacity of 167 mgd and a current average daily flow of approximately 110 mgd. There are no plans to increase the capacity of the treatment plant.

(b) Existing Sewage Collection System. The sewage collection system in Milpitas is owned and maintained by the City. A 36- to 48-inch wastewater trunk line extends under North

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[1]City of Milpitas, Mc McCarthy Ranch Mixed-Use Project Water Supply Assessment, approved by the Milpitas City Council on October 21, 2008, pages 4-5.

[2]City of Milpitas, Mc McCarthy Ranch Mixed-Use Project Water Supply Assessment, approved by the Milpitas City Council on October 21, 2008, page 5.

[3]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 93.

McCarthy Boulevard from Highway 237 to the Milpitas Pump Station located on McCarthy Boulevard near Dixon Landing Road (site 5 on Figure 3.3 in chapter 3 herein).[1] A 6-inch wastewater line is located under North McCarthy Boulevard, which adjoins the project sites.

13.2.2 Pertinent Plans and Policies

The Milpitas General Plan *Land Use Element* (adopted in 2002) contains the following principle and policy relevant to consideration of the wastewater service impacts of the proposed project:

- *Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.* (Principle 2.d-G-1, page 2-37)

- *Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.* (Policy 2.d-I-1, page 2-37)

13.2.3 Significance Criteria

Based on the CEQA Guidelines, the project would be described in this EIR as having a significant environmental impact related to wastewater service if it would:[2]

(a) exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board;

(b) require or result in the construction of new wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

(c) result in a determination by the wastewater treatment provider that serves the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or

(d) result in a public service condition that is inconsistent with any applicable land use plan, policy, or regulation of an agency that has jurisdiction over the project, including Milpitas General Plan provisions.

[1]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 93.

[2]CEQA Guidelines, Appendix G, items XVI(a), XVI(b), XVI(e), and IX(b).

13.2.4 Impacts and Mitigation Measures

Impact 13-1: Project-Related and Cumulative Impacts on Sewage Treatment and Transmission Capacity. The project would increase wastewater generation in the project vicinity. The project-proposed change in site C land use from industrial to commercial would likely produce a net increase in sewage generation, compared to estimates for the project area included in the City's 2004 Sewer Master Plan. Under its existing contract, the City currently has excess capacity at the San Jose/Santa Clara Water Pollution Control Plant, and the 2004 Sewer Master Plan did not identify any deficiencies or required mitigation in the project vicinity. It is therefore unlikely that the project would cause exceedances of Regional Water Quality Control Board wastewater treatment requirements, require new or expanded wastewater facilities, result in a determination that the wastewater treatment plant has inadequate capacity, or conflict with local planning provisions for wastewater service. However, because the project could generate more sewage than currently anticipated in applicable planning documents, the project's incremental contribution to sewage treatment and transmission capacity demand is considered a ***potentially significant project and cumulative impact*** [see criteria (a) through (d) in subsection 13.2.3, "Significance Criteria," above].

Mitigation 13-1. The City shall require that all new development on the project sites coordinate and cooperate with the City of Milpitas to ensure that adequate San Jose/Santa Clara Water Pollution Control Plant sewage treatment capacity is available and that maximum feasible water conservation is achieved through the project design. Implementation of this measure would reduce the project and cumulative impact on sewage treatment and transmission capacity to a ***less-than-significant level.***

13.3 POLICE

13.3.1 Setting

(a) Existing Police Service in Project Vicinity. The City of Milpitas Police Department (MPD) provides police services within the Milpitas city limits, including the project sites. The city is divided into six geographical beats. The MPD provides service from one central police station located at 1275 North Milpitas Boulevard. The MPD employs 95 sworn officers and operates 26 marked patrol cars.[1]

(b) Existing Response Times. The MPD's average response time within the city is approximately four minutes and 40 seconds. Highest priority is assigned to emergency calls where life-threatening conditions occur. The target response time for such emergency calls is

[1]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 101.

three minutes. Currently, the average police response time for non-emergency calls within the City is estimated to be approximately five minutes.[1]

13.3.2 Pertinent Plans and Policies

The Milpitas General Plan *Land Use Element* (adopted in 2002) contains the following principle and policy relevant to consideration of the police service impacts of the proposed project:

- *Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.* (Principle 2.d-G-1, page 2-37)

- *Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.* (Policy 2.d-I-1, page 2-37)

13.3.3 Significance Criteria

Based on the CEQA Guidelines, the project would be expected to have a significant impact on police services if it would:[2]

(a) result in a need for new or physically altered facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services; or

(b) result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the Milpitas General Plan.

13.3.4 Impacts and Mitigation Measures

Project-Related Increase in Police Service Demands. Buildout on the project sites would increase demands for Milpitas Police Department services in the project vicinity. The increased demand for police services would not result in a need for new or altered facilities, however, nor would the project result in a public service condition inconsistent with the Milpitas General Plan. The project's police service demand impact would therefore be ***less than significant.*** Project businesses and employees would generate additional calls for police assistance and the need for expanded police patrols in the area. The proposed industrial and commercial development would increase the total population of Milpitas during standard business hours, but would not permanently increase the city's population because no housing is proposed as part of the project. The project would be constructed in conformance with current codes, including requirements for appropriate safety features to minimize criminal activity. In addition, the Milpitas Police Department would review future project designs to ensure that they incorporate appropriate safety features.

Mitigation. No significant impact has been identified; no mitigation is required.

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[1]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 101.

[2]CEQA Guidelines, Appendix G, items XIII(a) and IX(b).

13.4 FIRE PROTECTION/EMERGENCY MEDICAL SERVICES

13.4.1 Setting

(a) Existing Fire Protection Service. The City of Milpitas Fire Department (MFD) provides fire protection service within the city limits. The MFD is responsible for emergency medical services, rescue services, hazardous and toxic materials emergency response, coordination of citywide disaster response efforts, enforcement of fire and life safety codes, enforcement of state and federal hazardous materials regulations, and investigation of the cause and origin of emergency events.

The City is involved in a Statewide Mutual Aid Agreement and agreements with surrounding jurisdictions, including the Santa Clara County Mutual Aid Plan and Bay Area Intercounty Fire Mutual Aid Plan for Local Resources. The San Jose Fire Department and Fremont Fire Department provide mutual aid to Milpitas in emergencies.[1]

(b) Existing Facilities, Staffing, and Equipment. The MFD maintains four fire stations and an administration facility. The closest fire station to the project sites is Station No. 4, located at 775 Barber Lane approximately 1.4 miles to the south. Station No. 4 is typically staffed with three personnel. The station is equipped with a combination engine ladder company and a hazardous materials response team.[2]

(c) Response Time Goals. The MFD's emergency response time goal is to deploy one engine to the scene of an emergency within four minutes. The MFD's average response time to all calls is currently below the four-minute response time goal. The MFD's current level of service standards are a reflex time of 1.5 minutes, a travel time of 3.5 minutes, and a second engine response time of 6 to 8 minutes.[3]

13.4.2 Pertinent Plans and Policies

The Milpitas General Plan *Land Use Element* (adopted in 2002) contains the following principle and policy relevant to consideration of the fire protection service impacts of the proposed project:

- *Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.* (Principle 2.d-G-1, page 2-37)

- *Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.* (Policy 2.d-I-1, page 2-37)

In addition, the Milpitas General Plan *Seismic and Safety Element* (adopted in 1997) contains the following fire safety policies:

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[1]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 102.

[2]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 102.

[3]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 102.

- *Maintain a response time of four minutes or less for all urban service areas.* (Policy 5.c-I-1, page 5-18)

- *Require…fire-resistive construction and compliance with California high-rise building requirement for buildings over three stories in height.* (Policy 5.c-I-3, page 2-37)

13.4.3 Significance Criteria

Based on the CEQA Guidelines, the project would be expected to have a significant impact on fire protection and emergency medical services if it would:[1]

(a) result in a need for new or physically altered facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection or emergency medical services; or

(b) result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the Milpitas General Plan.

13.4.4 Impacts and Mitigation Measures

Project-Related Increase in Fire Protection and Emergency Medical Service Demands. Buildout on the project sites would increase demands for Milpitas Fire Department services in the project vicinity. The increased demand for fire protection and emergency medical services would not result in a need for new or altered facilities, however, nor would the project result in a public service condition inconsistent with the Milpitas General Plan. The project's impact on fire protection and emergency medical services would therefore be ***less than significant.***

Project businesses and employees would generate additional calls for fire protection and emergency medical services. The project would be constructed in conformance with current Fire Code standards, however. In addition, the Fire Police Department would review future project designs to ensure that they incorporate appropriate fire protection and safety features.

Mitigation. No significant impact has been identified; no mitigation is required.

13.5 SOLID WASTE SERVICE

13.5.1 Setting

Allied Waste Services (a private company) provides solid waste and recycling collection services for businesses located in the City of Milpitas. The City has contracted with Newby Island Landfill for disposal of municipal solid waste. According to the Countywide Integrated Waste Management Plan, Santa Clara County has sufficient landfill capacity for approximately the next 23 years.[2]

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[1]CEQA Guidelines, Appendix G, items XIII(a) and IX(b).

[2]City of Milpitas, The Campus at McCarthy Ranch Draft EIR, August 2008, page 94.

13.5.2 Pertinent Plans and Policies

(a) California Integrated Waste Management Act. The California Integrated Waste Management Act of 1989 required cities to divert 25 percent of their solid waste from landfills by 1995, and 50 percent by the year 2000. Municipalities face fines of up to $10,000 per day for non-compliance. The State generally places the burden of responsibility for waste stream reduction on local municipalities (i.e., cities and counties).

(b) Milpitas General Plan. The Milpitas General Plan *Land Use Element* (adopted in 2002) contains the following principle and policy relevant to consideration of the solid waste service impacts of the proposed project:

- *Provide all possible community facilities and utilities of the highest standards commensurate with the present and anticipated needs of Milpitas, as well as any special needs of the region.* (Principle 2.d-G-1, page 2-37)

- *Coordinate capital improvement planning for all municipal service infrastructure with the location and timing of growth.* (Policy 2.d-I-1, page 2-37)

In addition, the Milpitas General Plan *Open Space & Environmental Conservation Element* (adopted in 2002) contains the following relevant principle and policy:

- *Undertake efforts to reduce the generation of waste, increase recycling and slow the filling of local and regional landfills, in accord with the California Integrated Waste Management Act of 1989.* (Principle 4.h-G-1, page 4-41)

- *Implement measures specified in the City's Source Reduction and Recycling Element and the City's Household Hazardous Waste Element.* (Policy 4.h-I-1, page 2-37)

(c) Milpitas Source Reduction and Recycling Element. The City of Milpitas Source Reduction and Recycling Element contains the following relevant goals: [1]

- *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.*

13.5.3 Significance Criteria

Based on the CEQA Guidelines, the project would be expected to have a significant impact on solid waste services if it would:[2]

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[1]City of Milpitas, Milpitas General Plan *Open Space & Environmental Conservation Element*, 2002, page 4-27.

[2]CEQA Guidelines, Appendix G, items XVI(f) and IX(b).

(a) be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or

(b) result in a public service condition that is inconsistent with pertinent adopted local plans and policies, including the Milpitas General Plan.

13.5.4 Impacts and Mitigation Measures

Project Impacts on Solid Waste Service. The project would increase demands for solid waste collection and disposal services. Based on average solid waste generation rates for the proposed project land uses,[1] the project at full operation (buildout) would be expected to generate a total of approximately 5,825 pounds (3.0 tons) per day of solid waste. The total would consist of approximately 5,357 pounds per day from the 1,071,470 square feet of proposed industrial (office park) uses and 468 pounds per day from the 93,580 square feet of proposed general commercial uses. The project-proposed change in site C land use from industrial to general commercial would not produce a significant change in the anticipated amount of solid waste. The project would be served by a landfill with sufficient capacity to accommodate the project's annual solid waste disposal needs at buildout, and would not result in a public service condition that is inconsistent with the Milpitas General Plan or Source Reduction and Recycling Element. Development on the project site would be expected to participate in the City's solid waste and recycling programs, which would help to reduce the amount of waste taken to the landfill. The project's impact on solid waste services would therefore be ***less than significant.***

Mitigation. No significant impact has been identified; no mitigation is required.

[1]Average solid waste generation rates are estimated at 5 pounds/1,000 square feet/day for industrial and general commercial uses. These rate estimates were derived by Wagstaff and Associates from data provided by the California Integrated Waste Management Board (CIWMB) (http://www.ciwmb.ca.gov/WasteChar/WasteGenRates/default.htm) and The Campus at McCarthy Ranch Draft EIR (City of Milpitas, 2008, page 95).

14. TRANSPORTATION AND CIRCULATION

This EIR chapter describes the transportation, circulation and parking implications of the proposed McCarthy Ranch project. The findings in this chapter were developed by Hexagon Transportation Consultants, Inc. under supervision of the City of Milpitas Engineering Division (Traffic Section). The analysis scope and methodology were determined in consultation with the City of Milpitas Engineering Division (Traffic Section) and the Santa Clara Valley Transportation Authority (VTA).

14.1 SETTING

This section describes the existing local and regional roadway network, transit services, pedestrian system and bicycle facilities serving the project site, and associated existing and background traffic conditions.

14.1.1 Existing Roadway Network

Figure 14.1 presents the regional and local roadway network serving the project site. Regional access is provided by I-880, I-680, and SR 237/Calaveras Boulevard; local access is provided by Dixon Landing Road and McCarthy Boulevard.

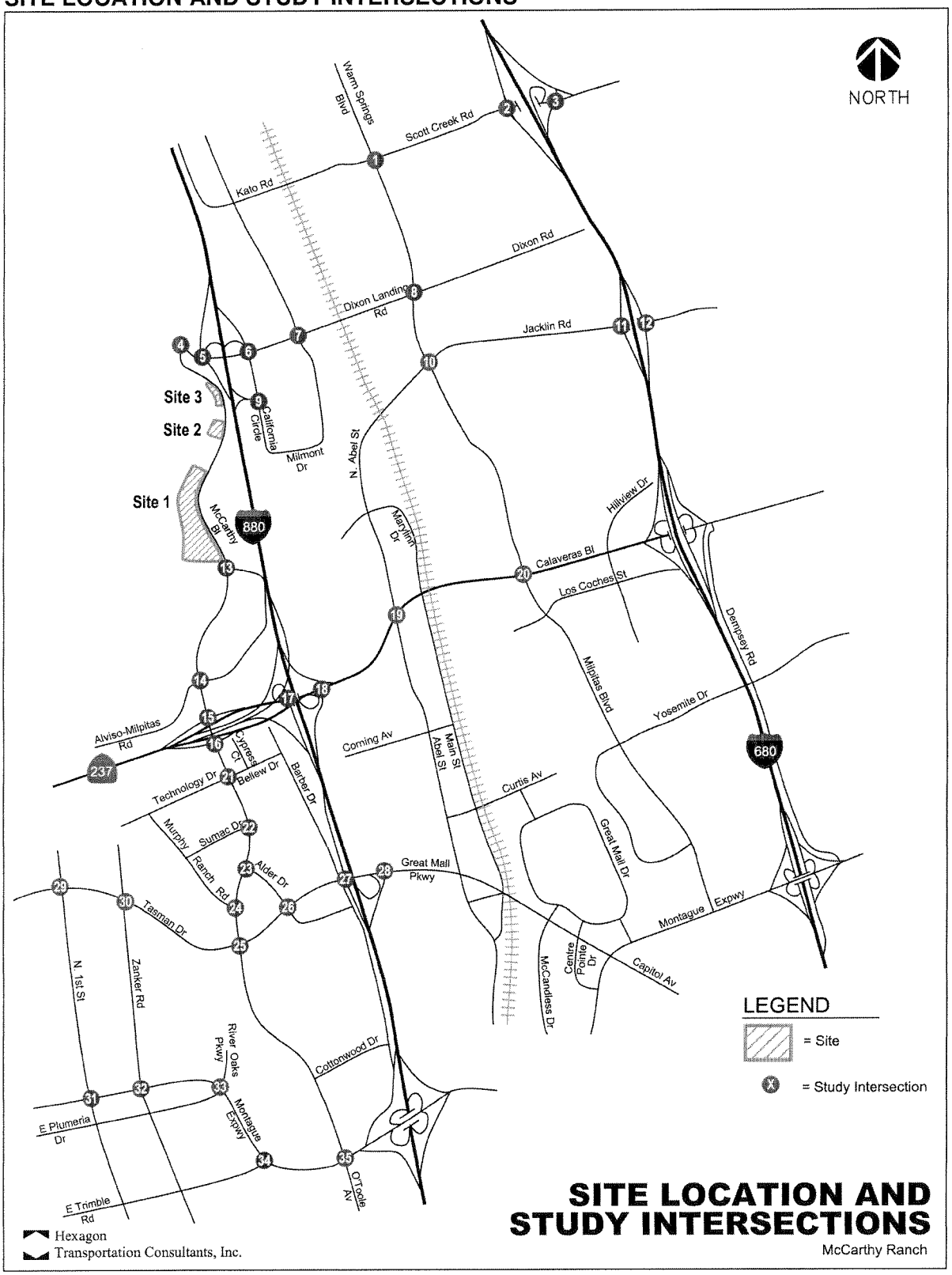
(a) Regional Roadways. Regional routes serving the project site are described below:

I-880 is a north/south freeway providing regional access between East Bay cities and San Jose, where it becomes SR 17. Within the City of Milpitas, I-880 is a six-to-ten lane freeway. The initial construction phases of the SR 237/I-880 interchange have recently been completed. South of Montague Expressway, I-880 has recently been widened to six lanes. High Occupancy Vehicle (HOV) lanes are provided north of the SR 237 Interchange. Access to the three project sites from I-880 is provided via the interchanges at Dixon Landing Road (to the north) and SR 237/Calaveras Boulevard (to the south), and McCarthy Boulevard.

I-680 is a north/south freeway traversing the eastern portion of Milpitas. The route connects the inland East Bay communities to the north with San Jose to the south. I-680 has six mixed flow lanes north of SR 237 and eight mixed flow lanes south of SR 237. A southbound HOV lane is currently in operation north of Calaveras Boulevard. Access to the project sites from I-680 is provided via the I-680/SR 237/Calaveras Boulevard interchange and SR 237/Calaveras Boulevard to McCarthy Boulevard.

State Route 237/Calaveras Boulevard is an east/west arterial between I-880 and I-680 and generally provides six travel lanes (four on the Union Pacific overcrossing). West of I-880, the route becomes a freeway with four mixed flow lanes and two HOV lanes. Access to the project sites from SR 237/Calaveras Boulevard is provided via the SR 237 West/McCarthy Boulevard intersection and McCarthy Boulevard.

Figure 14.1
SITE LOCATION AND STUDY INTERSECTIONS



Further north beyond the immediate project vicinity, *Mission Boulevard (State Routes 262 and 238)* is a north/south interregional, predominantly four-lane surface arterial connecting I-880 in southern Fremont to I-580 in Hayward, and interconnecting the central areas of Fremont, Union City, and Hayward. Access to the project sites from Mission Boulevard is provided via Warm Springs Road, Dixon Landing Road and McCarthy Boulevard; or via I-880, Dixon Landing Road and McCarthy Boulevard.

(b) Local Roadways. The two local roadways serving the project site are described below:

Dixon Landing Road is a four-lane, east/west, roadway that extends west from McCarthy Boulevard to Milpitas Boulevard where it becomes Dixon Road. Dixon Road is a four-lane roadway that primarily serves commercial residential areas east of I-880.

McCarthy Boulevard is a four-lane divided north/south arterial connecting Montague Expressway in the south to Dixon Landing Road in the north. McCarthy Boulevard provides direct access to SR 237, Montague Expressway, and I-880 for the three project sites and numerous business park and commercial uses west of I-880.

(c) CMP Routes and Intersections. State statute requires that a Congestion Management Agency be established and a Congestion Management Program (CMP) be developed, adopted, and updated biennially by every county that includes an urbanized area. As the Congestion Management Agency for Santa Clara County, VTA is responsible for maintaining and implementing the County's CMP.

The CMP is required to address the impact of local growth on the regional transportation system. Statutory elements of the CMP include Highway and Roadway System monitoring and associated local conformance requirements for all of the county's jurisdictions. The CMP is required by state statute to identify a network of key regional routes--i.e., *routes of regional significance*--and establish associated operational standards (traffic service objectives), monitoring requirements and impact review procedures for local conformance. For the purposes of this EIR, the VTA's CMP-identified *routes of regional significance* are referred to as "CMP routes" and "CMP intersections."

(d) Study Intersections. Intersections, rather than midblock roadway segments, are almost always the critical capacity-controlling locations for urban and suburban roadway networks. The following 35 "study" intersections have been identified in consultation with City staff as most likely to be affected by the project and thus warranting analysis in this EIR (the study intersection numbers below correspond to Figure 14.1; CMP intersections are designated with an asterisk):

City of Fremont Intersections:

(1) Warm Springs Boulevard and Kato Road/Scott Creek Road
(2) I-680 SB Ramps and Scott Creek Road (unsignalized)
(3) I-680 NB Ramps and Scott Creek Road (unsignalized)

City of Milpitas Intersections:

(4) McCarthy Boulevard and Dixon Landing Road
(5) I-880 SB Ramps and Dixon Landing Road

(6) California Circle and I-880 NB Ramps
(7) Milmont Drive and Dixon Landing Road
(8) Milpitas Boulevard/Warm Springs Boulevard and Dixon Landing Road
(9) I-880 NB Ramps/California Circle and Dixon Landing Road
(10) Milpitas Boulevard and Abel Street/Jacklin Road
(11) I-680 SB Ramps and Jacklin Road
(12) I-680 NB Ramps and Jacklin Road
(13) McCarthy Boulevard and Ranch Drive (North)
(14) McCarthy Boulevard and Ranch Drive (South)
(15) McCarthy Boulevard and SR 237 West
(16) McCarthy Boulevard and SR 237 East
(17) I-880 SB Ramps and Calaveras Boulevard
(18) I-880 NB Ramps and Calaveras Boulevard
(19) Abel Street and Calaveras Boulevard*
(20) Milpitas Boulevard and Calaveras Boulevard*
(21) McCarthy Boulevard and Technology Drive/Bellew Drive
(22) McCarthy Boulevard and Sumac Drive (unsignalized)
(23) McCarthy Boulevard and Alder Drive
(24) McCarthy Boulevard and Murphy Ranch Road (unsignalized)
(25) McCarthy Boulevard and Tasman Drive
(26) Alder Drive and Tasman Drive
(27) I-880 SB Ramps and Tasman Drive/Great Mall Parkway
(28) I-880 NB Ramps and Great Mall Parkway

City of San Jose Intersections:

(29) N. 1st Street and Tasman Drive
(30) Zanker Road and Tasman Drive
(31) N 1st Street and Montague Expressway
(32) Zanker Road and Montague Expressway
(33) River Oaks Parkway and Montague Expressway
(34) Trimble Road and Montague Expressway
(35) McCarthy Boulevard and Montague Expressway

14.1.2 Existing Transit Service

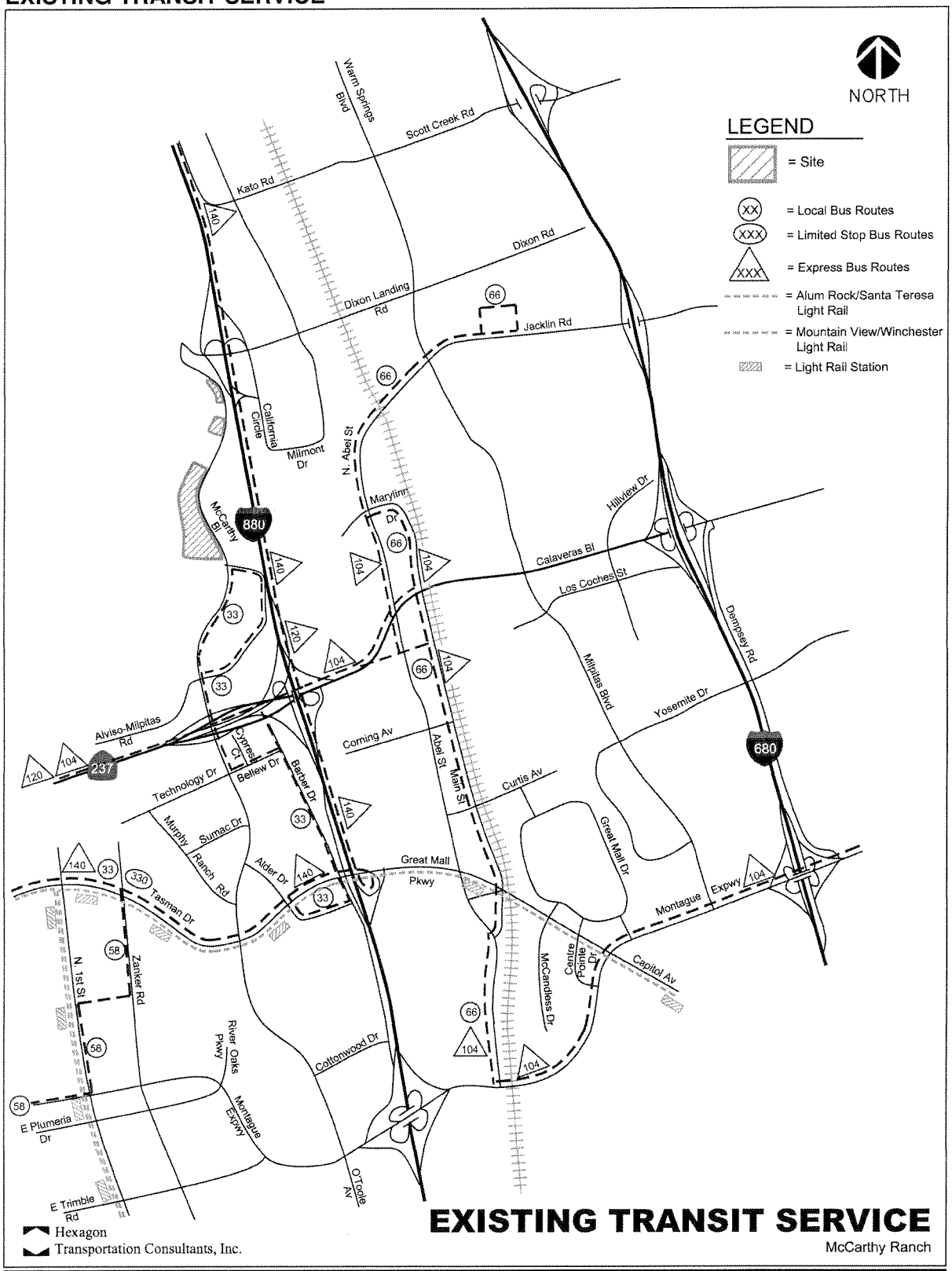
The Santa Clara Valley Transportation Authority (VTA) also operates light rail and bus service in Santa Clara County. Existing VTA service in the project vicinity is described below and shown on Figure 14.2.

(a) VTA Bus Service. As illustrated on Figure 14.2, there are six VTA local bus service routes in the project vicinity:

(1) *The 33 line* provides service between McCarthy Ranch and Great Mall/Main Transit Center via McCarthy Boulevard, Bellew Drive, and Barber Lane, with 30-minute headways during commute hours.

(2) The 66 line provides local service between North Milpitas and South San Jose via Main Street, Oakland Road, 1st Street/Monterey Road, and Snell Avenue, with 15 to 30-minute headways during commute hours.

Figure 14.2
EXISTING TRANSIT SERVICE



(3) The 104 line is an express route that provides service between Penitencia Creek Transit Center and Palo Alto via US 101, SR 237, Abel Street and Montague Expressway, with 30 to 45-minute headways during commute hours.

(4) The 120 line is an express route that provides service between the Fremont BART station and Lockheed Martin Transit Center via SR 237 and Mission Boulevard, with 60-minute headways during commute hours.

(5) The 140 line is an express route that provides service between the Fremont BART station and Mission College via Mission Boulevard, I-880, and Tasman Drive, with 30 to 60-minute headways during commute hours.

(6) The 330 line is a limited stop route that provides service between Almaden/Camden and I-880/Milpitas LRT Station via Tasman Drive and San Tomas Expressway, with 45-minute headways during commute hours.

(b) VTA Light Rail Transit (LRT). There are five LRT stations located along the VTA's Alum Rock/Santa Teresa (Guadalupe Corridor) light rail line within approximately two miles of the project site. The line provides service on 15-minute headways during commute and midday hours. It provides service between Santa Teresa in south San Jose through Milpitas via Tasman Drive, Great Mall Parkway and Capitol Avenue to Alum Rock in north San Jose. These five closest LRT stations are listed below:

(1) The Baypointe LRT Station is located between N. 1st Street and Zanker Road. The Baypointe LRT station provides a direct connection to local VTA bus service (the 33, 140 and 330 lines).

(2) The Cisco Way LRT Station is located between McCarthy Boulevard and Zanker Road. The Cisco Way LRT station also provides a direct connection to VTA bus service (the 33, 140 and 330 lines).

(3) The I-880/Milpitas LRT Station is located near Tasman Drive and Alder Drive. The I-880/Milpitas LRT station provides a direct connection to local VTA bus service (the 33, 140 and 330 lines) and offers bicycle lockers.

(4) The Great Mall/Main Street Transit Center is located on the north side of Great Mall Parkway east of Main Street. This intermodal LRT and bus transfer facility provides elevated LRT service, VTA bus service (the 104, 140 and 180 express lines and 33, 66 and 217 local lines), a park-and-ride facility and bicycle lockers.

(5) The Montague LRT Station is located near Montague Expressway and Capitol Avenue. The Montague LRT station does not provide direct connections to local VTA bus service.

14.1.3 Existing Pedestrian and Bicycle Facilities

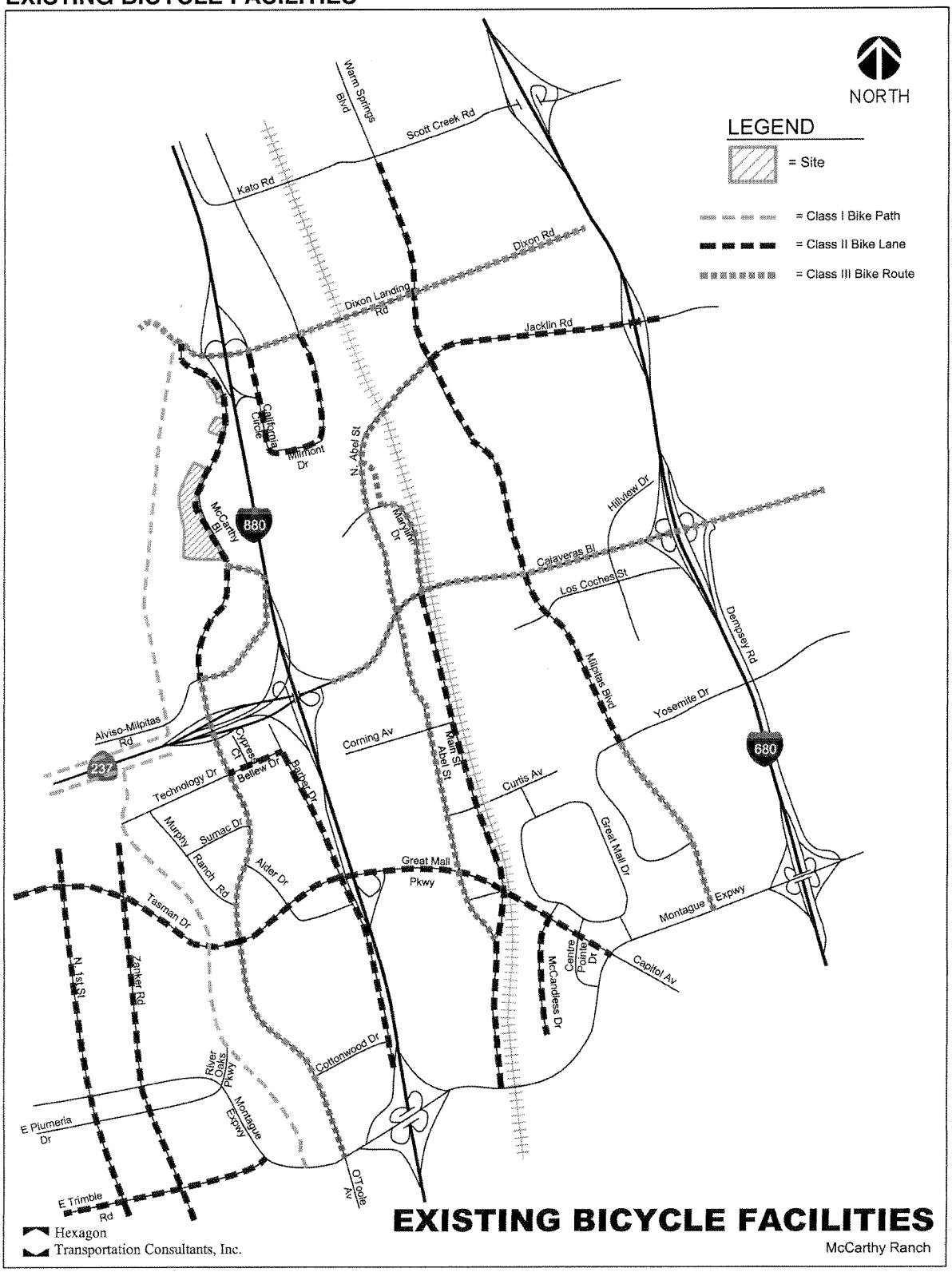
(a) Sidewalks. Sidewalks are found along both sides of McCarthy Boulevard and along virtually all other previously-described local roadways in the project vicinity.

(b) Bicycle Facilities. According to the *City of Milpitas Bikeway Master Plan* and the Valley Transportation Agency (VTA) Santa Clara Valley Bikeways Map, there are numerous City- and

County-designated bikeways within the project vicinity. Bicycle facilities in the area are classified as either bike paths (Class I), bike lanes (Class II), or bike routes (Class III). Bike paths are paved trails that are separated from roadways. Bike lanes are narrow roadway lanes designated for bicycle use by striping, pavement legends, and signs. Bike routes are roadways designated for bicycle use by signs only. Mapped routes in the project vicinity, as illustrated on Figure 14.3, and include:

- *McCarthy Boulevard,* which has Class II bicycle lanes from Dixon Landing Road to Ranch Road (S), and Class III bicycle routes from Ranch Road (S) to Montague Expressway.
- *Ranch Drive,* which has Class III bicycle routes along its entirety.
- *Great Mall Parkway/Tasman Drive,* which has Class II bicycle lanes from the western city limits to Montague Expressway in the east.
- *The Coyote Creek levee* along the western border of the three project sites, which has Class I off-street bicycle paths from Dixon Landing Road in the north to SR 237 in the south.
- *Dixon Landing Road,* which has Class III bicycle routes from I-680 in the east to the I-880 southbound off-ramp in the west
- *Calaveras Boulevard,* which has Class III bicycle routes from the eastern city limits to the I-880 northbound ramps in the west.
- *Abel Street,* which has Class III bicycle routes from Main Street in the south to Milpitas Boulevard in the north.
- *Jacklin Road,* which has Class II bicycle lanes from Park Victoria Drive in the east to Milpitas Boulevard in the west.
- *Main Street,* which has Class II bicycle lanes from the southern city limits to Calaveras Boulevard in the north, and Class III bicycle routes from Calaveras Road to Weller Lane.
- *Marylinn Drive,* which has Class III bicycle routes from Weller Lane in the south to Vasona Street in the north.
- *Vasona Street,* which has Class III bicycle routes from Marylinn Drive in the south to a bicycle access point just southeast of the intersection of Abel Street and Redwood Avenue.
- *California Circle,* which has Class II bicycle lanes along its entirety. Milmont Drive, a continuation of California Circle, has Class II bicycle lanes until it loops back to Dixon Landing Road.
- *Milpitas Boulevard,* which has Class II bicycle lanes from the County line in the north to Yosemite Drive in the south, where it becomes a Class III route to Montague Expressway.
- *Barber Lane,* which has Class II bicycle lanes from Bellew Drive in the north to McCarthy Boulevard in the south.

Figure 14.3
EXISTING BICYCLE FACILITIES



- *Bellew Drive,* which has Class II bicycle lanes from Barber Lane in the east to McCarthy Boulevard in the west.
- *McCandless Drive,* which has Class II bicycle lanes from Great Mall Parkway in the north to Montague Expressway in the south.
- *SR 237,* which has Class I off street bicycle paths on the north and south side from Zanker Road in the west to McCarthy Boulevard in the east.

14.1.4 Roadway Operation Analysis Methodology

(a) Analysis Scenarios. Roadway system operation has been evaluated in this EIR analysis during the critical morning (AM) and evening (PM) peak hours for the following scenarios:

(1) Scenario 1: Existing Conditions. Existing Conditions have been evaluated based on existing peak hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent traffic counts by the cities of Milpitas, Fremont, and San Jose.

(2) Scenario 2: Background Conditions. Background Conditions are defined as assumed conditions just prior to completion of the proposed project development. Background Conditions have been evaluated based on anticipated near-term future background traffic volumes on the local roadway network. Background traffic volumes were estimated by adding projected volumes from approved but not yet completed developments to existing peak hour volumes. The approved but not yet completed developments include those in the City of Milpitas Approved Trips Inventory (ATI), the City of Fremont approved development list, and the North San Jose (NSJ) Phase One project scenario.

(3) Scenario 3: Project Conditions. Project Conditions have been evaluated based on assumed Background Conditions on the near-term future roadway network plus traffic generated by the project (hereafter called *project traffic volumes*).

(4) Scenario 4: Cumulative Conditions. Cumulative Conditions were evaluated based on projected year 2030 traffic volumes on the roadway network plus the project traffic volumes. Per City of Milpitas requirements, the Cumulative Conditions scenario was evaluated for selected study roadway segments in the greater Milpitas area. The cumulative traffic volumes were determined using the Milpitas version of the VTA travel forecasting model.[1]

Note Re: Milpitas Interim Traffic Conditions. *For City of Milpitas local transportation planning purposes related to the McCarthy Ranch Mixed Use project, separate from the CEQA compliance process, a* ***"Milpitas interim traffic conditions analysis"*** *has also been completed for pending nearby projects in Milpitas only for use in determining fair share responsibilities for those local interim roadway improvement needs over which the City has exclusive control. The results of this analysis are described in Appendix 20.2: Supplemental Traffic Information--Milpitas Interim Conditions, in this Draft EIR. The cumulative effects of these pending Milpitas projects, as well as nearby pending projects in southern Fremont and northern San Jose, are also addressed in this chapter under Scenario 4: Cumulative Conditions.*

(b) Level of Service Calculation. Following common transportation planning and engineering practice, operational conditions at the study intersections and selected freeway segments have

[1]Average control delay at signalized intersections is calculated using the method described in chapter 16 of the 2000 *Highway Capacity Manual*, using the TRAFFIX analysis software. Consistent with common practice, the average delay for signalized study intersections was calculated for this analysis using the TRAFFIX level of service analysis software package.

been evaluated using the "Level of Service" (LOS) methodology. The LOS methodology involves use of a commonly used grading system to evaluate and describe roadway operational conditions. The LOS grading system considers such traffic flow factors as speed, travel time, delay, and freedom to maneuver. Six grades of operation are used ranging from LOS A, representing the best operating conditions, to LOS F, representing the worst operating conditions. LOS E represents "at capacity" operations. When demand exceeds the design capacity of a roadway facility, stop-and go conditions typically result and operations are designated as LOS F.

The adopted City of Milpitas, City of Fremont, City of San Jose, and CMP (VTA) level of service methodologies for intersections utilize TRAFFIX software incorporating CMP-based default settings. TRAFFIX is based on the *2000 Highway Capacity Manual* (HCM) method, and evaluates intersection operations on the basis of average delay for all vehicles at the intersection. The methodology varies for signalized versus unsignalized intersections, and for freeway segments, as follows:

Signalized Intersections. The signalized intersection LOS methodology evaluates intersection operation based on average control vehicular delay for all vehicles entering the intersection. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration. The average control delay for signalized intersections is correlated to a level of service designation, as shown in Table 14.1.

Unsignalized Intersections. The LOS rating for unsignalized intersections is based on the weighted average control delay expressed in seconds per vehicle, as shown in Table 14.2.[1] At two-way or side street-controlled intersections, LOS is calculated for each controlled movement, not for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop-controlled locations, LOS is computed for the intersection as a whole considering all approaches.

Freeway Segments. Following the methodology prescribed in the CMP (VTA) technical guidelines, the level of service for freeway segments has been estimated based on vehicle density. Vehicle density is calculated by the following formula: D = V / (N*S), where:

D= density, in vehicles per mile per lane (vpmpl)
V= peak hour volume, in vehicles per hour (vph)
N= number of travel lanes
S= average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to level of service grading as shown in Table 14.3. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from HOV (carpool) lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments three lanes or wider in one direction and a capacity of 2,200 vphpl be used for segments two lanes wide in one direction.

For 2030 cumulative conditions, the traffic operations at the study freeway segments have been calculated based on the volume-to-capacity ratio, correlated to a level of service rating. Table 14.4 shows the roadway types, capacity assumptions, and LOS thresholds that were used for this analysis.

[1]Operations of the unsignalized intersections were evaluated using the methodology contained in chapter 17 of the 2000 *Highway Capacity Manual.*

Table 14.1
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Average Control Delay Per Vehicle (seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

SOURCE: Transportation Research Board, *Highway Capacity Manual 2000,* Exhibit 16-2.

Table 14.2
UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description of Operations	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	Greater than 50.0

SOURCE: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000), p. 17-2.

Table 14.3
FREEWAY SEGMENT LEVEL OF SERVICE BASED ON DENSITY

Level of Service	Description	Density (vehicles/mile/lane)
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0-11
B	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	>11-18
C	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	>18-26
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	>26-46
E	At this level, the freeway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	>46-58
F	Vehicular flow breakdowns occurs. Large queues form behind breakdown points.	>58

Source: VTA CMP *Traffic Level of Service Analysis Guidelines*, June 2003.

Table 14.4
CITY OF MILPITAS ROADWAY SEGMENT LEVEL OF SERVICE

		Level of Service					
Facility	Lane Capacity	A	B	C	D	E	F
Freeway	2,000	1,200	1,400	1,600	1,800	2,000	>2,000
Expressway	1,100	660	770	880	990	1,100	>1,100
Major Arterial	1,000	600	700	800	900	1,000	>1,000
Arterial	900	540	630	720	810	900	>900

(c) Level of Service Standards. For intersections and roadway segments in Fremont, Milpitas, and San Jose that are not CMP facilities, the minimum acceptable level of service is LOS D. For CMP intersections, roadway segments, and freeway segments, the minimum acceptable level of service is LOS E.

14.1.5 Existing Roadway System Operational Conditions

(a) Existing Lane Configurations and Traffic Volumes. Existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 14.4. Existing peak hour traffic volumes were obtained from the cities of Milpitas, Fremont, and San Jose, supplemented with manual turning-movement counts by the EIR transportation consultant at intersections where existing counts were either unavailable or outdated (more than two years old). The resulting existing peak hour intersection traffic volumes are shown on Figure 14.5. The traffic count data are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

(b) Existing Intersection Levels of Service. The level of service results for the signalized and unsignalized study intersections under existing conditions are summarized in Table 14.5. The results show that one study intersection currently operates at an unacceptable LOS measured against the City of Milpitas, City of Fremont, City of San Jose and CMP level of service guidelines during at least one of the peak traffic hours:

- N. 1st Street and Montague Expressway--LOS F, PM peak hour.

The level of service calculation sheets are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

Note: The NB right-turn PM peak hour volumes at the intersection of I-880 NB ramps and Great Mall parkway were reduced by 50 percent. This reduction in volume is based on field observations where it was determined that approximately 65 percent of the northbound right turn traffic turns on red. To be conservative, only a 50 percent reduction in right turns was applied in the LOS calculations to reflect the observed traffic behavior at this intersection.

(c) Existing Signal Warrants. The peak hour signal warrant (*Caltrans Traffic Manual*, Chapter 9, Warrant 11) was checked for the four unsignalized study intersections to determine whether signalization would be justified on the basis of existing peak hour volumes. The analysis results show that, under existing conditions, the intersection of McCarthy Boulevard and Sumac Drive meets the traffic volume signal warrant during the PM peak hour. The other three unsignalized study intersections do not meet the peak hour volume warrant. The signal warrant analysis sheets are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

(d) Existing Freeway Levels of Service. Traffic volumes for the study freeway segments were obtained from the 2006 CMP Annual Monitoring Report. The results, which are summarized in Table 14.6, show that the following four study freeway segments currently operate at LOS F in at least one direction during at least one of the peak traffic hours:

Figure 14.4
EXISTING LANE CONFIGURATIONS

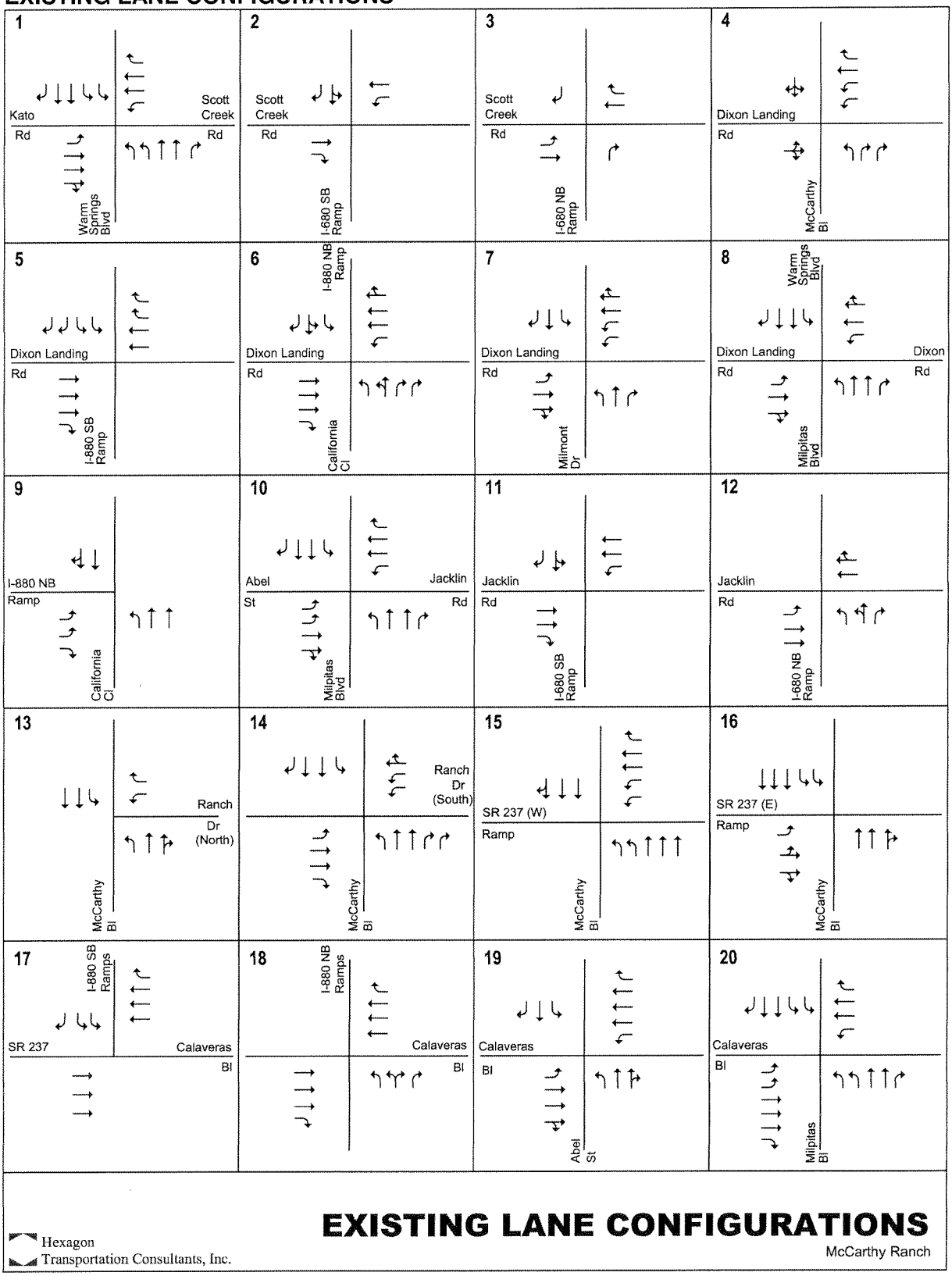


Figure 14.4 (continued)
EXISTING LANE CONFIGURATIONS

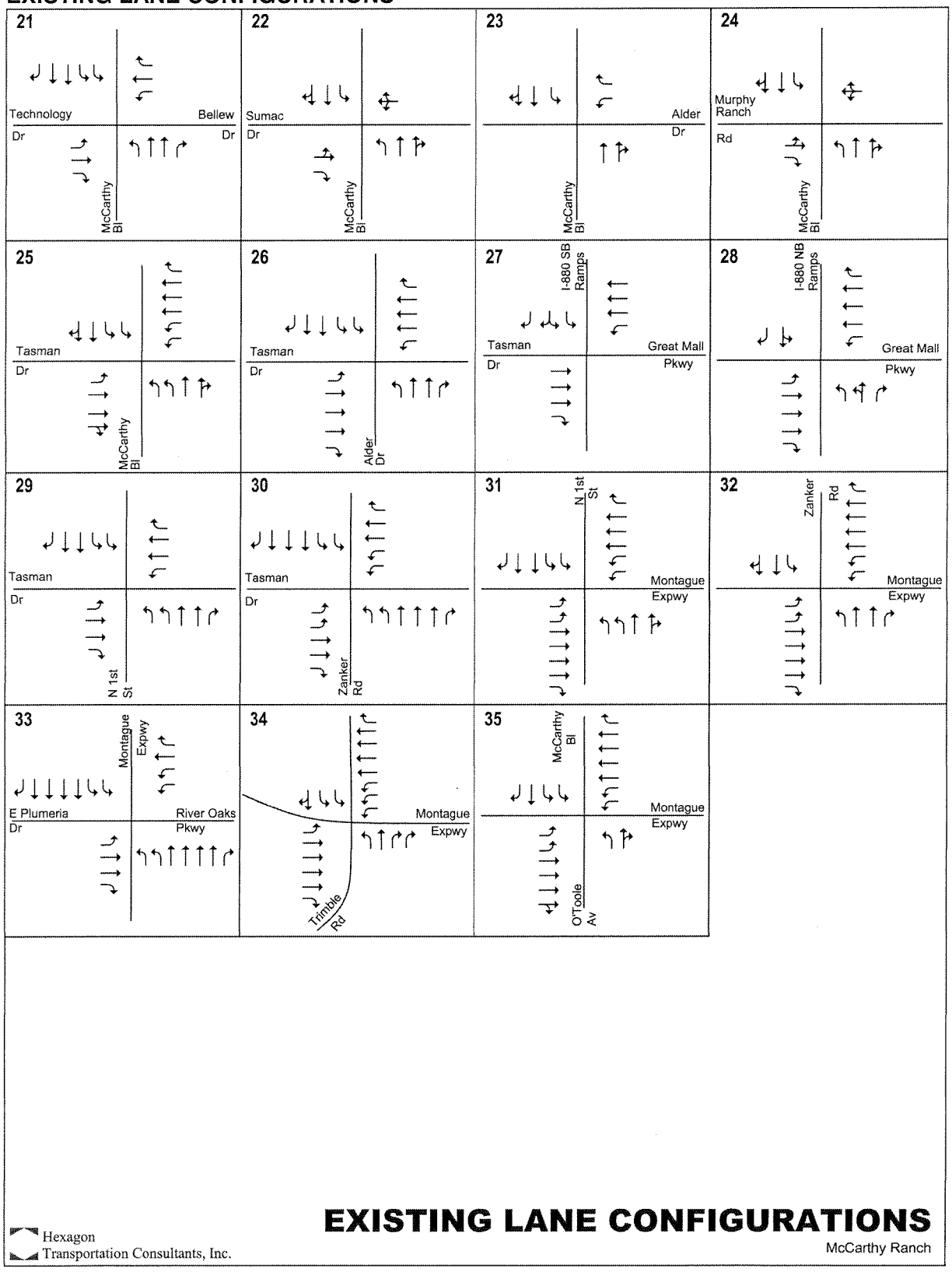


Figure 14.5
EXISTING TRAFFIC VOLUMES

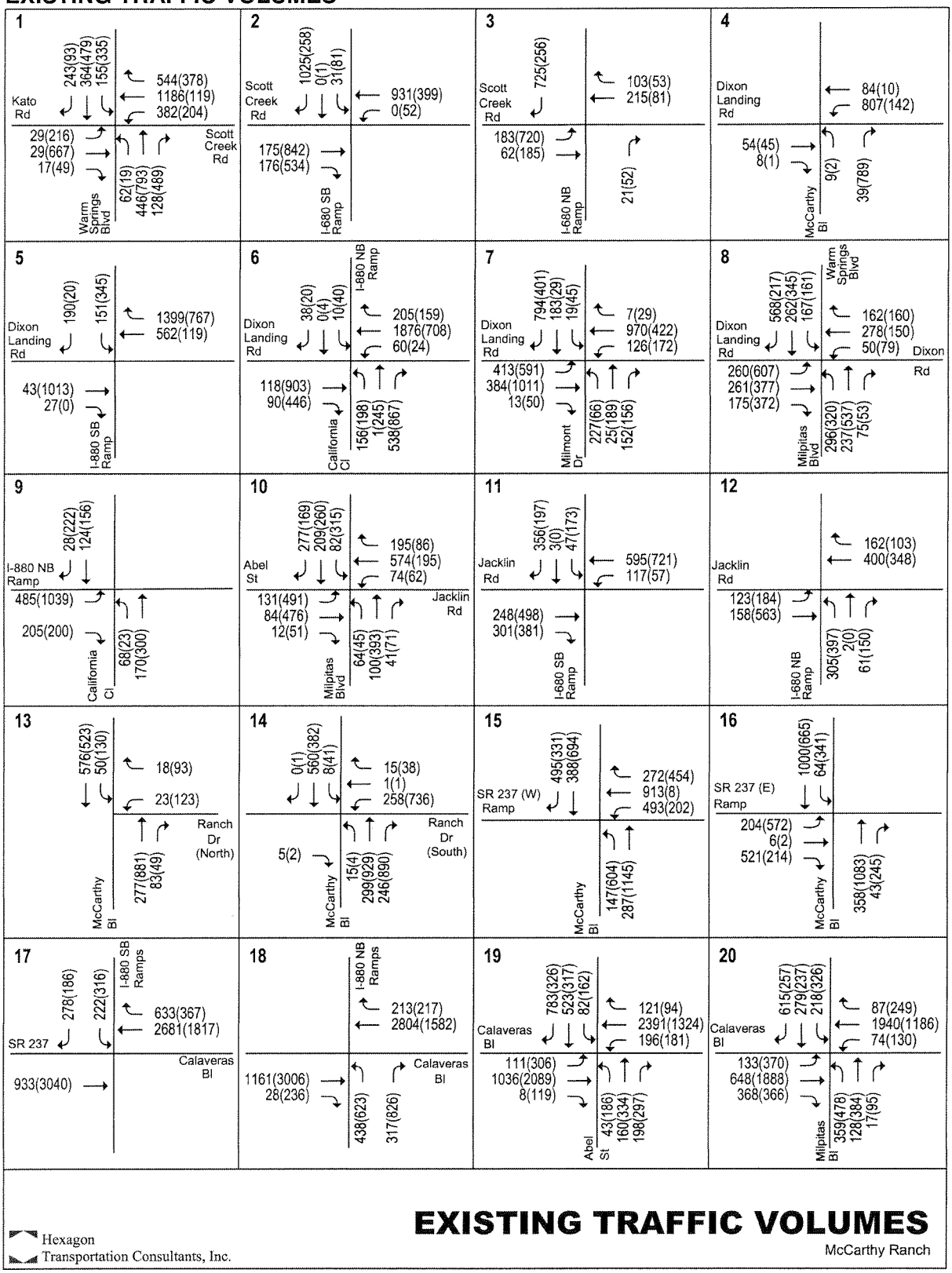


Figure 14.5 (continued)
EXISTING TRAFFIC VOLUMES

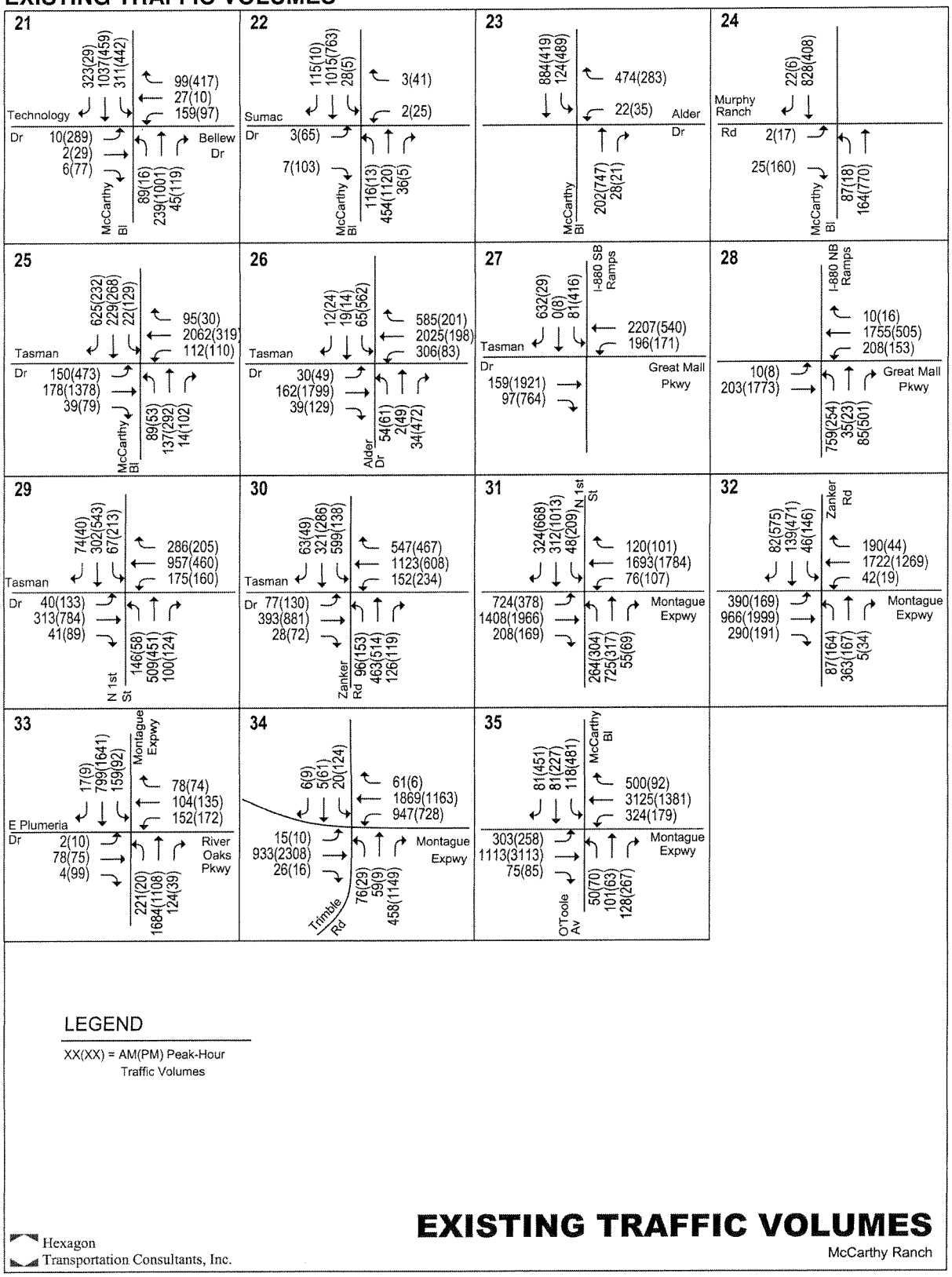


Table 14.5
EXISTING INTERSECTION LEVELS OF SERVICE

Intersection		Peak Hour	Average Intersection Delay[1]	LOS[2]
1. Warm Springs Blvd & Kato Rd/Scott Creek Rd		AM	27.5	C
		PM	36.0	D
2. SB 680 Ramps & Scott Creek Rd	Unsignalized	AM	0.6	A
		PM	3.0	A
3. NB 680 Ramps & Scott Creek Rd	Unsignalized	AM	3.2	A
		PM	6.9	A
4. McCarthy Blvd & Dixon Landing Rd		AM	9.7	A
		PM	7.9	A
5. SB 880 Ramps & Dixon Landing Rd		AM	9.5	A
		PM	9.2	A
6. NB 880 Ramps/California Cir & Dixon Landing Rd		AM	16.6	B
		PM	20.8	C
7. Milmont Drive & Dixon landing Rd		AM	51.5	D
		PM	27.2	C
8. Warm Springs Blvd/Milpitas Blvd & Dixon Landing Rd		AM	43.5	D
		PM	46.1	D
9. California Cir & NB 880 Ramps		AM	12.2	B
		PM	14.6	B
10. Milpitas Blvd & Abel St/Jacklin Rd		AM	22.7	C
		PM	27.9	C
11. SB 680 Ramps & Jacklin Rd		AM	17.2	B
		PM	12.9	B
12. NB 680 Ramps & Jacklin Rd		AM	16.0	B
		PM	15.9	B
13. McCarthy Blvd & Ranch Drive (North)		AM	6.8	A
		PM	11.3	B
14. McCarthy Blvd & Ranch Drive (South)		AM	12.8	B
		PM	15.6	B
15. McCarthy Blvd & WB 237 Ramps		AM	16.4	B
		PM	18.1	B
16. McCarthy Blvd & EB 237 Ramps		AM	16.3	B
		PM	15.1	B
17. SB 880 Ramps & SR 237		AM	11.3	B
		PM	8.4	A

SOURCE: Hexagon Transportation Consultants, Inc.

Notes:

[1] Average control delay per vehicle for signalized intersections using the methodology described in the 2000 *Highway Capacity Manual*. LOS calculations conducted using the TRAFFIX analysis software package.

[2] LOS = Level of Service

* Denotes County Congestion Management Plan (CMP) monitored intersection.

AM = AM Peak Hour; PM = PM Peak Hour

Bold font indicates unacceptable conditions.

Table 14.5 (continued)
EXISTING INTERSECTION LEVELS OF SERVICE

Intersection		Peak Hour	Average Intersection Delay[1]	LOS[2]
18. NB 880 Ramps & Calaveras Blvd		AM	18.4	B
		PM	28.7	C
19. Abel St & Calaveras Blvd*		AM	51.4	D
		PM	49.1	D
20. Milpitas Blvd & Calaveras Blvd*		AM	58.5	E
		PM	47.1	D
21. McCarthy Blvd & Technology Dr/Bellew Dr		AM	20.3	C
		PM	32.2	C
22. McCarthy Blvd & Sumac Dr	Unsignalized	AM	1.1	A
		PM	5.1	A
23. McCarthy Blvd & Alder Dr		AM	20.5	C
		PM	16.4	B
24. McCarthy Blvd & Murphy Ranch Rd	Unsignalized	AM	1.1	A
		PM	1.5	A
25. McCarthy Blvd & Tasman Dr		AM	51.3	D
		PM	37.5	D
26. Alder Dr & Tasman Dr		AM	13.8	B
		PM	33.1	C
27. SB 880 Ramps & Tasman Dr/Great Mall Pkwy		AM	20.4	C
		PM	19.7	B
28. NB 880 Ramps & Great Mall Pkwy		AM	22.4	C
		PM	21.1	C
29. N 1st St & Tasman Dr		AM	31.2	C
		PM	37.0	D
30. Zanker Rd & Tasman Dr		AM	33.5	C
		PM	31.3	C
31. N. 1st St & Montague Expwy*		AM	53.9	D
		PM	**88.0**	**F**
32. Zanker Rd & Montague Expwy*		AM	36.6	D
		PM	55.3	E
33. Montague Expwy & River Oaks Pkwy		AM	33.0	C
		PM	27.2	C
34. Trimble Rd & Montague Expwy *[3]		AM	30.1	C
		PM	57.3	E
35. McCarthy Blvd/O'Toole Av & Montague Expwy*		AM	39.3	D
		PM	65.4	E

SOURCE: Hexagon Transportation Consultants, Inc.
Notes:
[1] Average control delay per vehicle for signalized intersections using the methodology described in the 2000 *Highway Capacity Manual.* LOS calculations conducted using the TRAFFIX analysis software package.
[2] LOS = Level of Service.
* Denotes County Congestion Management Plan (CMP) monitored intersection.
AM = AM Peak Hour; PM = PM Peak Hour **Bold font** indicates unacceptable conditions.

Table 14.6
EXISTING FREEWAY LEVELS OF SERVICE

Freeway	Segment			Direction	Peak Hour	Mixed-Flow Lanes Ave. Speed/a/	# of Lanes	Volume[1]	Density	LOS
I-880	E. Brokaw Rd	to	Montague Expwy	NB	AM	65	3	6,050	31.0	D
					PM	66	3	5,150	26.0	D
I-880	Montague Expwy	to	Great Mall Pkwy	NB	AM	66	3	5,150	26.0	D
					PM	66	3	5,150	26.0	D
I-880	Great Mall Pkwy	to	SR 237	NB	AM	65	3	6,050	31.0	D
					PM	47	3	6,490	46.0	E
I-880	SR 237	to	Dixon Landing	NB	AM	62	4	7,380	33.1	D
					PM	11	4	4,190	105.8	F
SR 237	Zanker Rd	to	McCarthy Blvd	EB	AM	66	2	3,430	26.0	C
					PM	52	2	4,370	42.0	D
I-880	Dixon Landing	to	SR 237	SB	AM	48	4	7,340	38.2	D
					PM	66	4	5,160	19.5	C
I-880	SR 237	to	Great Mall Pkwy	SB	AM	66	3	4,360	22.0	C
					PM	66	3	4,160	21.0	C
I-880	Great Mall Pkwy	to	Montague Expwy	SB	AM	65	3	5,660	29.0	D
					PM	19	3	4,850	85.1	F
I-880	Montague Expwy	to	E. Brokaw Rd	SB	AM	66	3	5,150	26.0	D
					PM	21	3	5,040	80.0	F
SR 237	McCarthy Blvd	to	Zanker Rd	WB	AM	6	2	2,120	147.2	F
					PM	16	2	3,610	94.0	F

[1] Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2006.

SOURCE: Hexagon Transportation Consultants, Inc.
AM = AM Peak Hour; PM = PM Peak Hour
Note: NB = northbound, SB = southbound, WB = westbound, EB = eastbound

- I-880, northbound between SR 237 and Dixon Landing Road--PM peak hour
- I-880, southbound between Great Mall Parkway and Montague Expressway--PM peak hour
- I-880, southbound between Montague Expressway and Brokaw Road--PM peak hour
- SR 237, westbound between McCarthy Boulevard and Zanker Road--AM and PM peak hours

14.1.6 Background Traffic Conditions

The Background Condition is defined as conditions just prior to completion of the proposed development, including volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site.

- *Milmont Drive/Dixon Landing Road*--The southbound through and left turn lanes will be consolidated into a shared through-left lane. An additional left turn will be added to the eastbound leg and a left turn lane will be converted to a through lane at the westbound leg.
- *McCarthy Boulevard/Ranch Drive (North)*--A western leg will be added to the intersection to provide access to an approved development west of McCarthy Boulevard.
- *McCarthy Boulevard/Alder Drive*--A western leg will be added to the intersection to provide access to an approved development west of McCarthy Boulevard.
- *N. 1st Street/Montague Expressway*--Montague Expressway will be expanded to provide four lanes in each direction under North San Jose Phase One improvements.
- *Zanker Road/Montague Expressway*--Montague Expressway will be expanded to provide four lanes in each direction under North San Jose Phase One improvements.
- *Montague Expressway/River Oaks Parkway*--Montague Expressway will be expanded to provide four lanes in each direction under North San Jose Phase One improvements.
- *Trimble Road/Montague Expressway*--Montague Expressway will be expanded to provide four lanes in each direction under North San Jose Phase One improvements. The County of Santa Clara will also build a flyover serving westbound Montague Expressway to southbound Trimble Road.

(b) Background Traffic Volumes. The Background Conditions scenario peak hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved but not yet constructed, partially constructed or not yet fully occupied developments. The added traffic from approved but not yet constructed developments was provided by the City of Milpitas in the form of its Approved Trips Inventory (ATI). The City of Fremont provided a list of approved developments in the vicinity of the study intersections. Traffic volumes associated with the North San Jose Phase One development plan were also included. The assumed approved but not yet constructed developments include:

- Tasman/McCarthy Business Center,
- Irvine Company R&D – Phase Two,
- Veritas Software,
- Apton Plaza Mixed-use,
- Elmwood Residential,
- Elmwood Auto Dealerships,
- North Main Street – Library,
- North Main Street – Senior Housing,
- North Main Street – County Medical Center,
- Fairfield Residential,
- RGC Residential,
- Hillview Center Mixed-use,
- Aspen Family Apartments,
- Starlight Center,
- Everlasting Private Foundation,
- Matteson Residential,
- Alexan Residential,
- Murphy Ranch Residential,
- Peery-Arrillaga Office,
- Sinclair Renaissance Residential,
- KB Homes/Warm Springs Village (From Fremont),
- Robson Homes/Kato Road Residential (From Fremont), and
- North San Jose Phase One (From San Jose).

Note that some of the projects listed above had been completed and/or were fully occupied as of February 2009. However, since most of the existing traffic counts used in this analysis were conducted in 2007, these recently completed and/or recently occupied projects were not yet (or were only partially) generating traffic when the "existing" counts were done and are therefore included in this analysis under Background traffic volumes.

Figure 14.6 presents the calculated traffic volumes at the study intersections during the AM and PM peak hours under the Background Conditions scenario.

(c) Background Intersection Level of Service. Background Condition levels of service were calculated for the study intersections for the AM and PM peak hours. Table 14.7 presents the LOS calculation results under Background Conditions. The LOS calculation worksheets are contained in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

The Background Condition traffic increases delay at the study intersections. The results in Table 14.7 show that most of the study intersections will continue to operate at acceptable LOS levels, but the following seven study intersections would operate at an unacceptable LOS measured against the City of Milpitas, City of Fremont and CMP level of service guidelines during at least one of the peak hours of traffic:

- Milpitas Boulevard and Calaveras Boulevard--LOS F, AM peak hour McCarthy Boulevard and Alder Drive--LOS E, PM peak hour,

Figure 14.6
BACKGROUND TRAFFIC VOLUMES

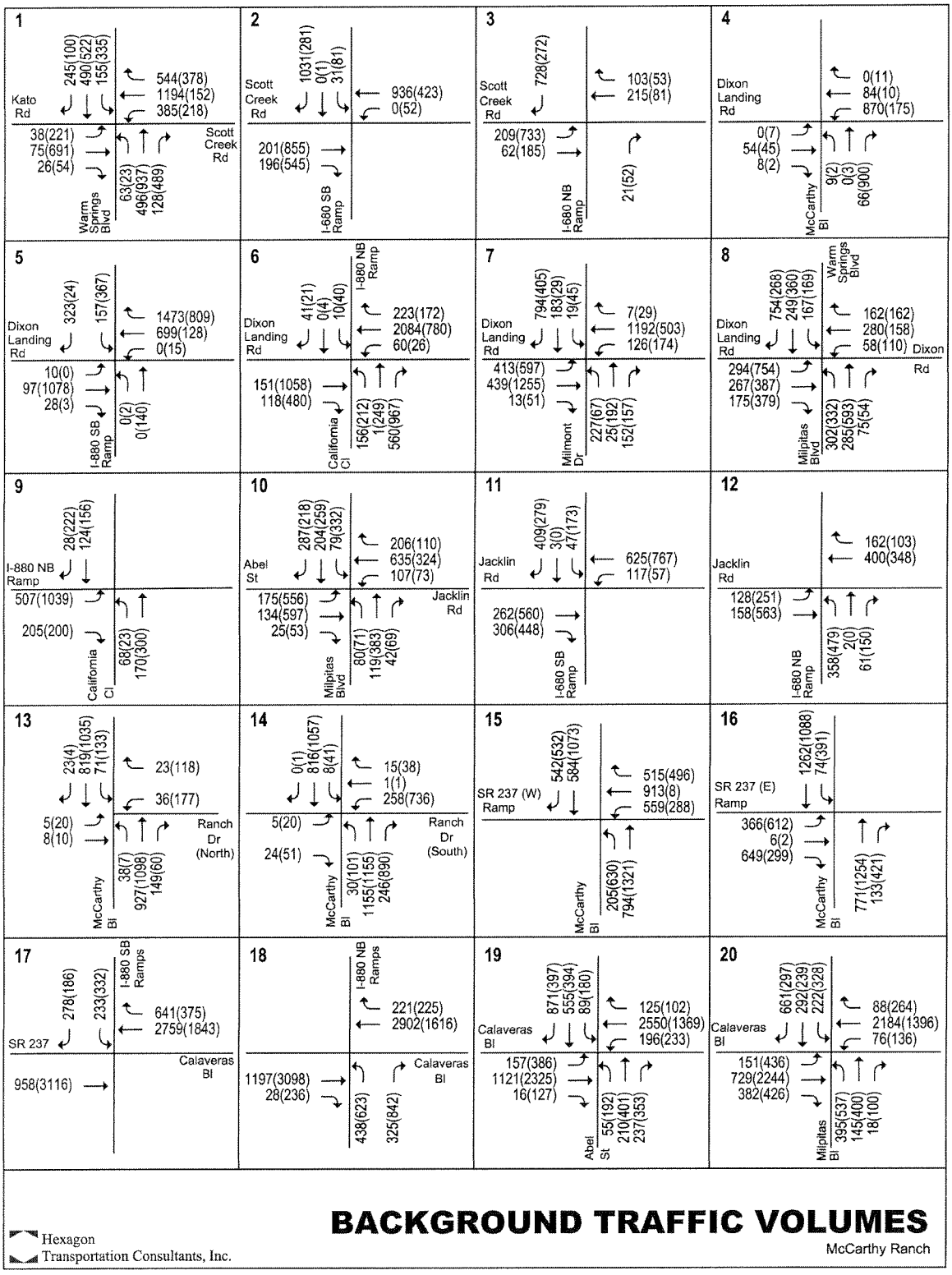


Figure 14.6 (continued)
BACKGROUND TRAFFIC VOLUMES

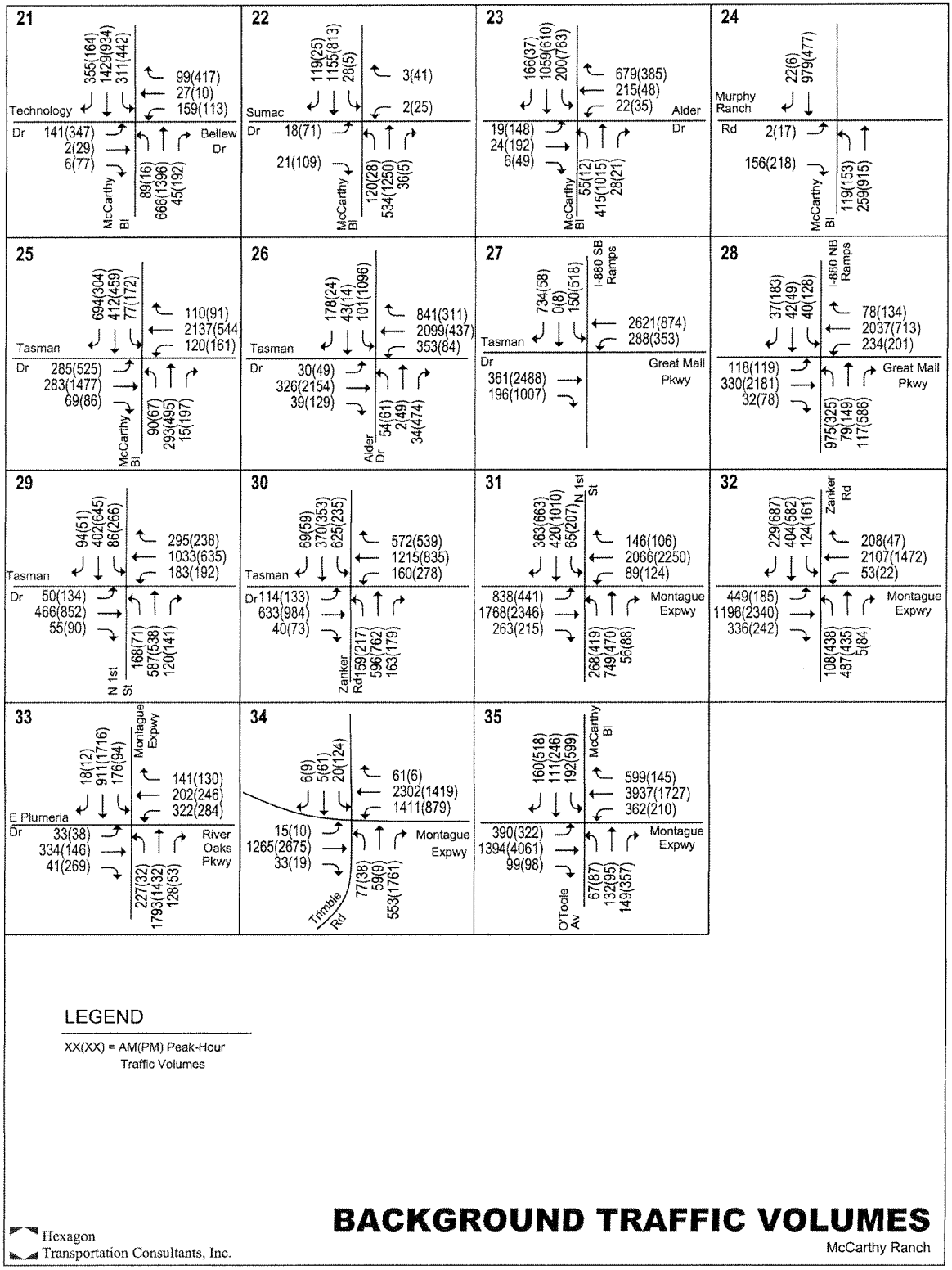


Table 14.7
INTERSECTION LEVELS OF SERVICE UNDER BACKGROUND CONDITIONS

Intersection		Peak Hour	Average Intersection Delay[1]	LOS[2]
1. Warm Springs Blvd & Kato Rd/Scott Creek Rd		AM	29.1	C
		PM	36.6	D
2. SB 680 Ramps & Scott Creek Rd	Unsignalized	AM	0.6	A
		PM	2.9	A
3. NB 680 Ramps & Scott Creek Rd	Unsignalized	AM	3.5	A
		PM	7.0	A
4. McCarthy Blvd & Dixon Landing Rd		AM	7.8	A
		PM	8.3	A
5. SB 880 Ramps & Dixon Landing Rd		AM	10.1	B
		PM	14.6	B
6. NB 880 Ramps/California Cir & Dixon Landing Rd		AM	17.3	B
		PM	21.8	C
7. Milmont Drive & Dixon landing Rd		AM	45.0	D
		PM	26.8	C
8. Warm Springs Blvd/Milpitas Blvd & Dixon Landing Rd		AM	37.1	D
		PM	45.7	D
9. California Cir & NB 880 Ramps		AM	12.1	B
		PM	14.6	B
10. Milpitas Blvd & Abel St/Jacklin Rd		AM	23.6	C
		PM	29.2	C
11. SB 680 Ramps & Jacklin Rd		AM	18.2	B
		PM	14.6	B
12. NB 680 Ramps & Jacklin Rd		AM	16.6	B
		PM	17.8	B
13. McCarthy Blvd & Ranch Drive (North)		AM	15.5	B
		PM	26.4	C
14. McCarthy Blvd & Ranch Drive (South)		AM	14.5	B
		PM	20.7	C
15. McCarthy Blvd & WB 237 Ramps		AM	17.1	B
		PM	24.2	C
16. McCarthy Blvd & EB 237 Ramps		AM	17.3	B
		PM	15.3	B
17. SB 880 Ramps & SR 237		AM	11.3	B
		PM	8.6	A

SOURCE: Hexagon Transportation Consultants, Inc.
Notes:
[1] Average control delay per vehicle for signalized intersections using the methodology described in the 2000 *Highway Capacity Manual*. LOS calculations conducted using the TRAFFIX analysis software package.
[2] LOS = Level of Service
* Denotes County Congestion Management Plan (CMP) monitored intersection.
AM = AM Peak Hour; PM = PM Peak Hour **Bold font** indicates unacceptable conditions.

Table 14.7 (continued)
INTERSECTION LEVELS OF SERVICE UNDER BACKGROUND CONDITIONS

Intersection		Peak Hour	Average Intersection Delay[1]	LOS[2]
18. NB 880 Ramps & Calaveras Blvd		AM	17.0	B
		PM	21.3	C
19. Abel St & Calaveras Blvd*		AM	65.5	E
		PM	64.0	E
20. Milpitas Blvd & Calaveras Blvd*		AM	**81.9**	**F**
		PM	57.1	E
21. McCarthy Blvd & Technology Dr/Bellew Dr		AM	26.5	C
		PM	40.3	D
22. McCarthy Blvd & Sumac Dr	Unsignalized	AM	2.3	A
		PM	9.0	A
23. McCarthy Blvd & Alder Dr		AM	31.4	C
		PM	**57.2**	**E**
24. McCarthy Blvd & Murphy Ranch Rd	Unsignalized	AM	2.4	A
		PM	2.5	A
25. McCarthy Blvd & Tasman Dr		AM	**79.2**	**E**
		PM	43.9	D
26. Alder Dr & Tasman Dr		AM	17.2	B
		PM	**87.3**	**F**
27. SB 880 Ramps & Tasman Dr/Great Mall Pkwy		AM	23.8	C
		PM	36.3	D
28. NB 880 Ramps & Great Mall Pkwy		AM	31.1	C
		PM	36.1	D
29. N 1st St & Tasman Dr		AM	32.5	C
		PM	38.1	D
30. Zanker Rd & Tasman Dr		AM	35.7	D
		PM	34.6	C
31. N. 1st St & Montague Expwy*		AM	56.0	E
		PM	**127.2**	**F**
32. Zanker Rd & Montague Expwy*		AM	44.7	D
		PM	**116.9**	**F**
33. Montague Expwy & River Oaks Pkwy		AM	46.0	D
		PM	41.6	D
34. Trimble Rd & Montague Expwy *		AM	26.4	C
		PM	**104.9**	**F**
35. McCarthy Blvd/O'Toole Av & Montague Expwy*		AM	53.1	D
		PM	**111.7**	**F**

SOURCE: Hexagon Transportation Consultants, Inc.
Notes:
[1] Average control delay per vehicle for signalized intersections using the methodology described in the 2000 *Highway Capacity Manual*. LOS calculations conducted using the TRAFFIX analysis software package.
[2] LOS = Level of Service
* Denotes County Congestion Management Plan (CMP) monitored intersection.
AM = AM Peak Hour; PM = PM Peak Hour **Bold font** indicates unacceptable conditions.

- McCarthy Boulevard and Tasman Drive--LOS E, AM peak hour,
- Alder Drive and Tasman Drive--LOS F, PM peak hour,
- N. 1st Street and Montague Expressway--LOS F, PM peak hour,
- Zanker Road and Montague Expressway--LOS F, PM peak hour,
- Trimble Road and Montague Expressway--LOS F, PM peak hour, and
- McCarthy Boulevard-O'Toole Avenue and Montague Expressway--LOS F, PM peak hour.

(d) Background Signal Warrants. The peak hour signal warrant (Caltrans Traffic Manual, Chapter 9, Warrant 11) was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of background peak hour volumes. The analysis showed that under Background Conditions the McCarthy Boulevard/Sumac Drive and McCarthy Boulevard/Murphy Ranch Road intersections would meet the signal warrant during the PM peak hour. The other two unsignalized study intersections would not meet the peak hour volume warrant. The signal warrant analysis sheets are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

14.2 PERTINENT PLANS AND POLICIES

The following Milpitas General Plan guiding principles and implementing policies are pertinent to consideration of the transportation and circulation effects of the proposed project:

- Continue to utilize the City's adopted Level of Service standards in evaluating development proposals and capital improvements. *(Current City LOS standards apply only to development east of I-880.)* (Guiding Principle 3.a-G-1)
- Maintain acceptable service standards for all major street and intersections. (Guiding Principle 3.a-G-2)
- Strive to maintain CMP LOS standards and goals for the CMP Roadway System in Milpitas. (Implementing Policy 3.a-1-1)
- For collectors and arterials east of Interstate 880 operating at baseline (1991) LOS F, require any development project that impacts the facility at or greater than one percent of facility capacity to implement mitigation measures to reduce the development project's impacts below the one percent level. If an identified location cannot be mitigated, measures designed to improve system-wide levels of service can be implemented. These system-wide improvement strategies will be contained in the Citywide Deficiency Plan. *(Conforms to CMA requirements and existing City LOS policy.)* (Implementing Policy 3.a-1-1)
- Recognize that the City's development pattern and deficiencies in the regional network have resulted in substandard service levels on certain streets where capacity cannot be increased. (Implementing Policy 3.a-1-3)

- On streets where substandard service levels are anticipated, investigate and implement improvement projects that will enhance traffic operations. (Implementing Policy 3.a-1-4)

  Measures such as parking prohibitions, turn prohibitions and minor widening should be evaluated on streets where existing development and space constraints make major widening projects infeasible.

  Streets expected to operate at LOS F at Plan buildout are:

  - *Route 237 between Abel Street and the southern Pacific railroad tracks; and*

  - *Montague Expressway between McCarthy Boulevard and Old Oakland Road, and between Capitol Avenue and Highway 680.*

- Require new development to pay its share of street and other traffic improvements based on its impacts. (Implementing Policy 3.b-1-1)

- Require all projects that generate more than 100 peak-hour (A.M. or P.M.) trips to submit a transportation impact analysis that follows guidelines established by CMP. (Implementing Policy 3.b-1-2) *This is part of the CMP requirements.*

- Promote measures that increase transit use and lead to improved utilization of the existing transportation system. (Guiding Principle 3.c-9-1)

- Provide adequate bicycle parking and end-of-trip support facilities for bicyclists at centers of public and private activity. (Guiding Principle 3.d-G-2)

- Promote intermodal commuting options. (Guiding Principle 3.d-G-3)

- Where appropriate, install bicycle lockers and/or racks at public parks, civic buildings and other community facilities. (Bicycle Policy 3.d-1-13)

- Include evaluation of bicycle facility needs in all planning applications for new developments and major remodeling or improvement projects. (Bicycle Policy 3.d-1-14)

- Encourage new and existing developments to provide end-of-trip facilities such as secure bicycle parking, on-site showers and clothing storage lockers, etc. (Bicycle Policy 3.d-1-15)

14.3 IMPACTS AND MITIGATION FINDINGS

14.3.1 Significance Criteria

For this EIR analysis, four sets of relevant significance criteria have been applied to determine impacts on intersections and freeways: (1) City of Milpitas intersection LOS standards, (2) City of Fremont intersection LOS standards, (3) City of San Jose intersection LOS standards, and (4) VTA CMP intersection LOS standards. These standards are described below:

(a) City of Milpitas Definition of Significant Project Intersection LOS Impacts. The project would result in a significant adverse LOS impact on traffic conditions at an intersection in the City of Milpitas if for either the AM or PM peak hour:

(1) the LOS at the intersection degrades from an acceptable D or better under Background Conditions to an unacceptable E or F under Project Conditions, or

(2) the LOS at the intersection is an unacceptable E or F under Background Conditions ***and*** the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds and the volume-to-capacity ratio (V/C) to increase by .01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e. the change in average stopped delay for critical movements is negative). In this case, the threshold of significance would be an increase in the critical V/C ratio by .01 or more.

A significant impact by the City of Milpitas standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection LOS to Background Conditions or better.

(b) City of Fremont Definition of Significant Project Intersection LOS Impacts. The project is said to create a significant adverse LOS impact on traffic conditions at an intersection in the City of Fremont if for either the AM or PM peak hour:

(1) the LOS at the intersection degrades from an acceptable D or better under Background Conditions to an unacceptable E or F under Project Conditions, or

(2) the LOS at the intersection is an unacceptable E or F under Background Conditions ***and*** the addition of project trips causes the average delay at the intersection to increase by more than four seconds.

A significant impact by the City of Fremont standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection LOS to Background Conditions or better.

(c) City of San Jose Definition of Significant Project Intersection LOS Impacts. The project is said to create a significant adverse LOS impact on traffic conditions at a signalized intersection in the City of San Jose if for either the AM or PM peak hour:

(1) the LOS at the intersection degrades from an acceptable D or better under Background Conditions to an unacceptable E or F under Project Conditions, or

(2) the LOS at the intersection is an unacceptable E or F under Background Conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by one percent (.01) or more.

An exception to criterion #2 above applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical

movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

A significant impact by City of San Jose standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to Background Conditions or better.

(d) VTA CMP Definition of Significant Project Intersection LOS Impacts. The definition of a significant impact at a VTA CMP intersection is the same as for the City of Milpitas, except that the CMP standard for acceptable LOS at a CMP intersection is E or better. A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection conditions to Background Conditions or better.

(e) VTA CMP Definition of Significant Project Freeway Segments Impacts. The VTA CMP defines an acceptable LOS for freeway segments as E or better. A project is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either the AM or PM peak hour:

(1) the LOS on the freeway segment degrades from an acceptable E or better under Existing Conditions to an unacceptable F under Project Conditions, or

(2) the LOS on the freeway segment is an unacceptable F under Project Conditions and the number of project trips on that segment constitutes at least one percent of capacity on that segment.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to better than Background Conditions.

(f) Milpitas Definition of Significant Cumulative Roadway Segment Impacts. The City of Milpitas requires an analysis of long-term project impacts on the major roadways within the City of Milpitas. Consistent with this requirement, year 2030 cumulative traffic operations at the study arterial roadway and freeway segments were evaluated based on volume-to-capacity ratio, correlated to LOS. Under Cumulative Conditions, the project would have a significant impact on a roadway or freeway segment if:

- the roadway or freeway segment is projected to operate below its LOS standard under the existing plan and under the proposed plan change is projected to cause an increase in traffic of at least one percent of its capacity; or

- the roadway or freeway segment is projected to operate at or better than its LOS standard under the existing plan and the proposed plan change is projected to degrade the level of service to less than acceptable levels.

On roadway segments under Cumulative Conditions, a project is said to benefit a roadway or freeway segment if:

- The roadway segment is projected to operate below its LOS standard under the existing plan and the proposed plan change is projected to cause a decrease in traffic of at least one percent of its capacity.

For CMP roadway segments, the minimum acceptable level of service is LOS E. At roadway segments in Milpitas that are not CMP roadway segments, the minimum acceptable level of service is LOS D.

14.3.2 Project Traffic Generation and Distribution

(a) Trip Generation. Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. For the most common land uses, there are standard trip generation rates that can be applied to predict the future traffic increases that would result from a new development. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates to the size of the development. Following standard City of Milpitas practice, the trip generation rates for the project's land uses have been based on those recommended by the San Diego Association of Governments (SANDAG). The City of Milpitas uses the SANDAG rates because it is believed that these rates better reflect trip generation characteristics for the land uses in Milpitas compared to the rates published in the Institute of Transportation Engineers Trip Generation Manuel. The use of SANDAG rates is consistent with VTA's Transportation Impact Analysis Guidelines. The SANDAG-based project trip generation estimates are presented in Table 14.8. As shown, it is estimated that the project would generate approximately 20,344 daily vehicle trips, with 1,971 vehicle trips occurring during the AM peak hour and 2,233 vehicle trips during the PM peak hour.

The net project trip estimates include retail pass-by trips. Pass-by trips are the estimated number of trips that would already pass directly by the project site and upon completion of the project would stop at the project site while en route to their ultimate destination. For retail uses, the proportion of pass-by trips comprises an average of 25 percent of the site-generated PM peak hour traffic.

(b) Trip Distribution and Assignment. The trip distribution patterns for the Office Park portion of the project (sites A and B) were developed based on a select zone analysis using VTA's Travel Forecasting Model. The select zone analysis project traffic distribution result was compared with distribution assumptions made in previous traffic studies in the area and was found to be reasonable. For the Office Park land use, it is estimated that approximately 29 percent of the project trips would come or go from areas west of the project, 37 percent from areas south of project, 29 percent from Alameda County, and 5 percent from areas east of I-680. The trip distribution pattern for the Community Shopping Center portion of the project was developed based on existing travel patterns and the relative locations of complementary land uses. The trip distribution patterns are shown graphically on Figure 14.7.

(c) Project Trips. The estimated peak hour trips generated by the project were assigned to the roadway system in accordance with the trip distribution pattern discussed above. Figure 14.8 shows the project trip assignment.

14.3.3 Project Traffic Conditions

It is assumed in this analysis that the near-term roadway network under Project Conditions would be the same as described above under Background Conditions.

(a) Project Traffic Volumes. Project trips, as represented in the project trip assignment, were added to background traffic volumes to obtain background plus project traffic volumes.

Table 14.8
PROJECT TRIP GENERATION ESTIMATES

Land Use	Size (acres)	FAR	Rate	Daily Rate	Daily Trips	AM Peak Hour Peak-Hour Rate	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour Peak-Hour Rate	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Project													
Office Park[1]	44.20	0.50	963 ksf	12	11,551	0.13	1351	150	1,502	0.13	300	1201	1,502
Office Park[1]	5.00	0.50	109 ksf	12	1,307	0.13	153	17	170	0.13	34	136	170
Community Shopping Center[2]	9.34	0.23	94 ksf	80	7,486	0.04	180	120	299	0.10	374	374	749
Pass-by Reduction[3]											*-94*	*-94*	*-187*
Total Net Trips:					**20,344**		**1,684**	**287**	**1,971**		**615**	**1,618**	**2,233**

[1] Trip rates (per ksf) based on SANDAG, *Vehicular Traffic Generation Rates*, April 2002. Office Park.
[2] Trip rates (per ksf) based on SANDAG, *Vehicular Traffic Generation Rates*, April 2002. Community Shopping Center.
[3] A reduction of 25% was applied to the retail use during the PM peak hour.

Background traffic volumes plus project trips are typically referred to simply as *project traffic volumes*; this is contrasted with the term *project trips*, which is used to signify the traffic that is produced specifically by the project. Figure 14.9 presents traffic volumes at the study intersections during the AM and PM peak hours under Project Conditions.

(b) Intersection Level of Service--Project Conditions. The results of the LOS analysis under Project Conditions are summarized in Table 14.9. Under Project Conditions, the results show that the following nine study intersections would operate at an unacceptable LOS measured against the City of Milpitas, City of Fremont, City of San Jose and CMP level of service guidelines during at least one of the peak hours of traffic:

- Milmont Drive and Dixon Landing Road--LOS E, AM peak hour,
- Milpitas Boulevard and Calaveras Boulevard--LOS F, AM peak hour,
- McCarthy Boulevard and Alder Drive--LOS F, PM peak hour,
- McCarthy Boulevard and Tasman Drive--LOS F, AM peak hour,
- Alder Drive and Tasman Drive--LOS F, PM peak hour,
- 1st Street and Montague Expressway--LOS F, PM peak hour,
- Zanker Road and Montague Expressway--LOS F, PM peak hour,
- Trimble Road and Montague Expressway--LOS F, PM peak hour, and
- McCarthy Boulevard-O'Toole Avenue and Montague Expressway--LOS F, PM peak hour.

All of the remaining study intersections would operate at acceptable levels. The LOS calculation sheets are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

Based on the significant criteria described in subsection 14.3.1 above, the project would cause a significant impact on five of the 35 study intersections:

Figure 14.7
PROJECT TRIP DISTRIBUTION

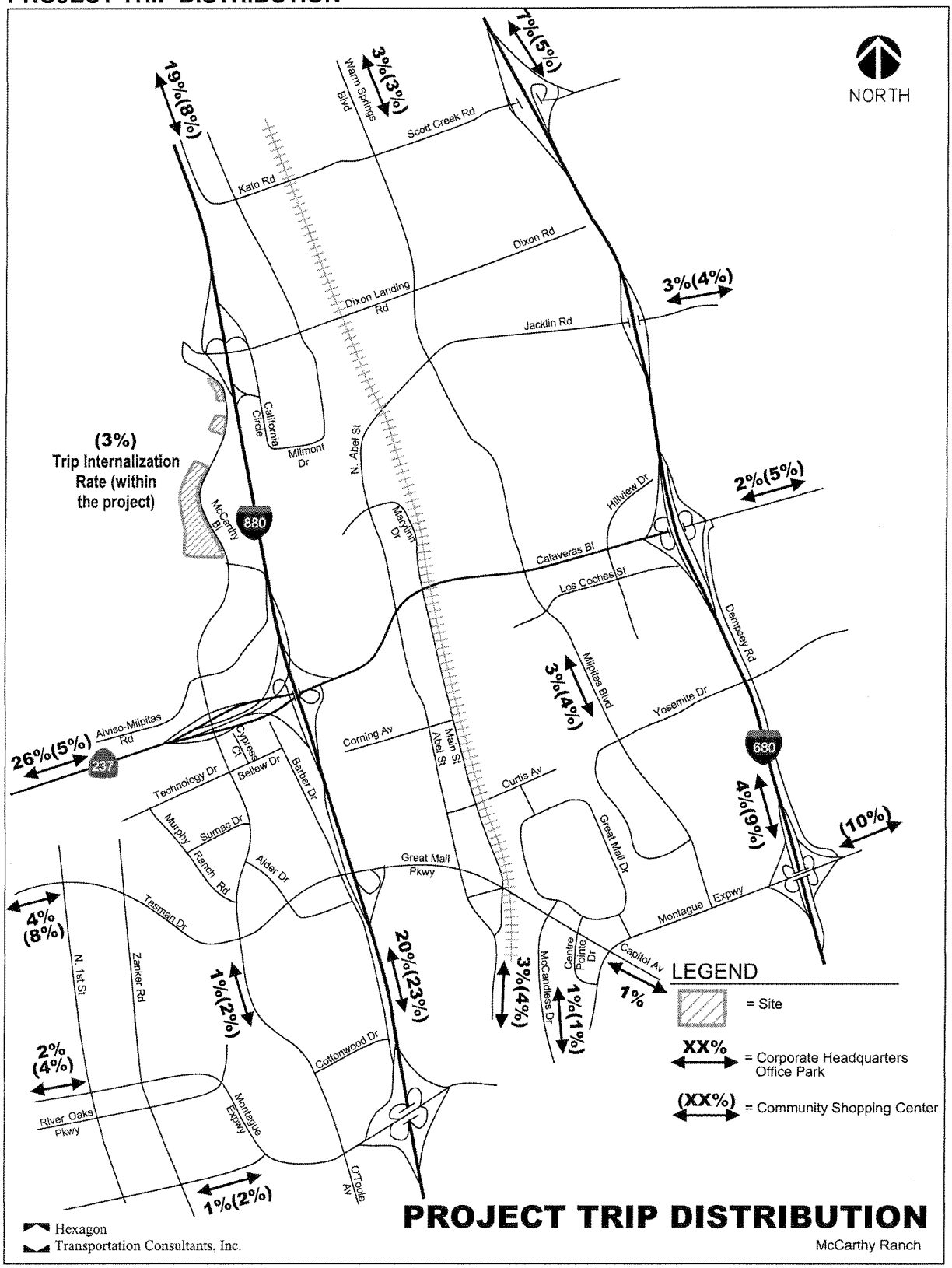


Figure 14.8
PROJECT TRIP ASSIGNMENT

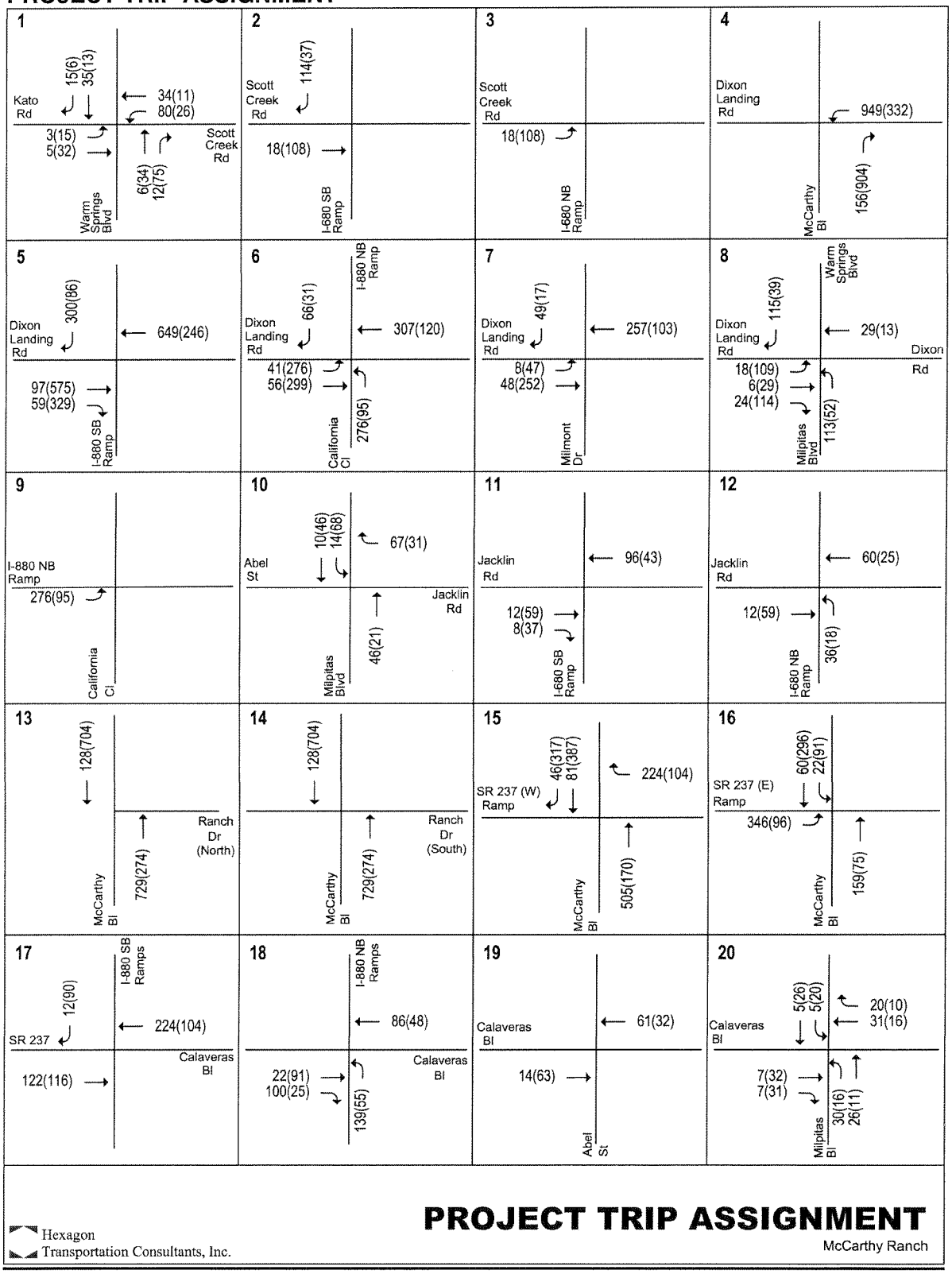


Figure 14.8 (continued)
PROJECT TRIP ASSIGNMENT

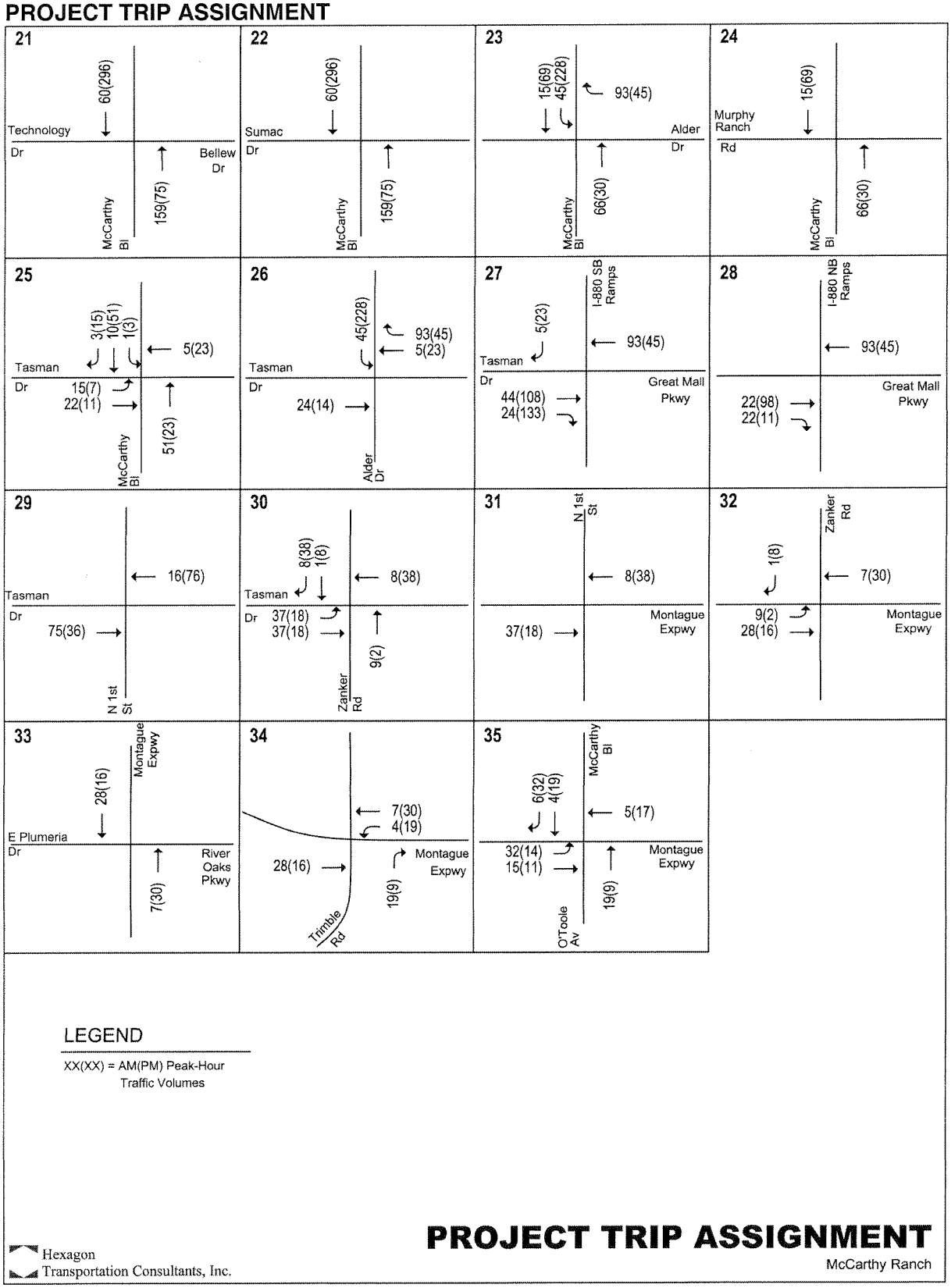


Figure 14.9
PROJECT TRAFFIC VOLUMES

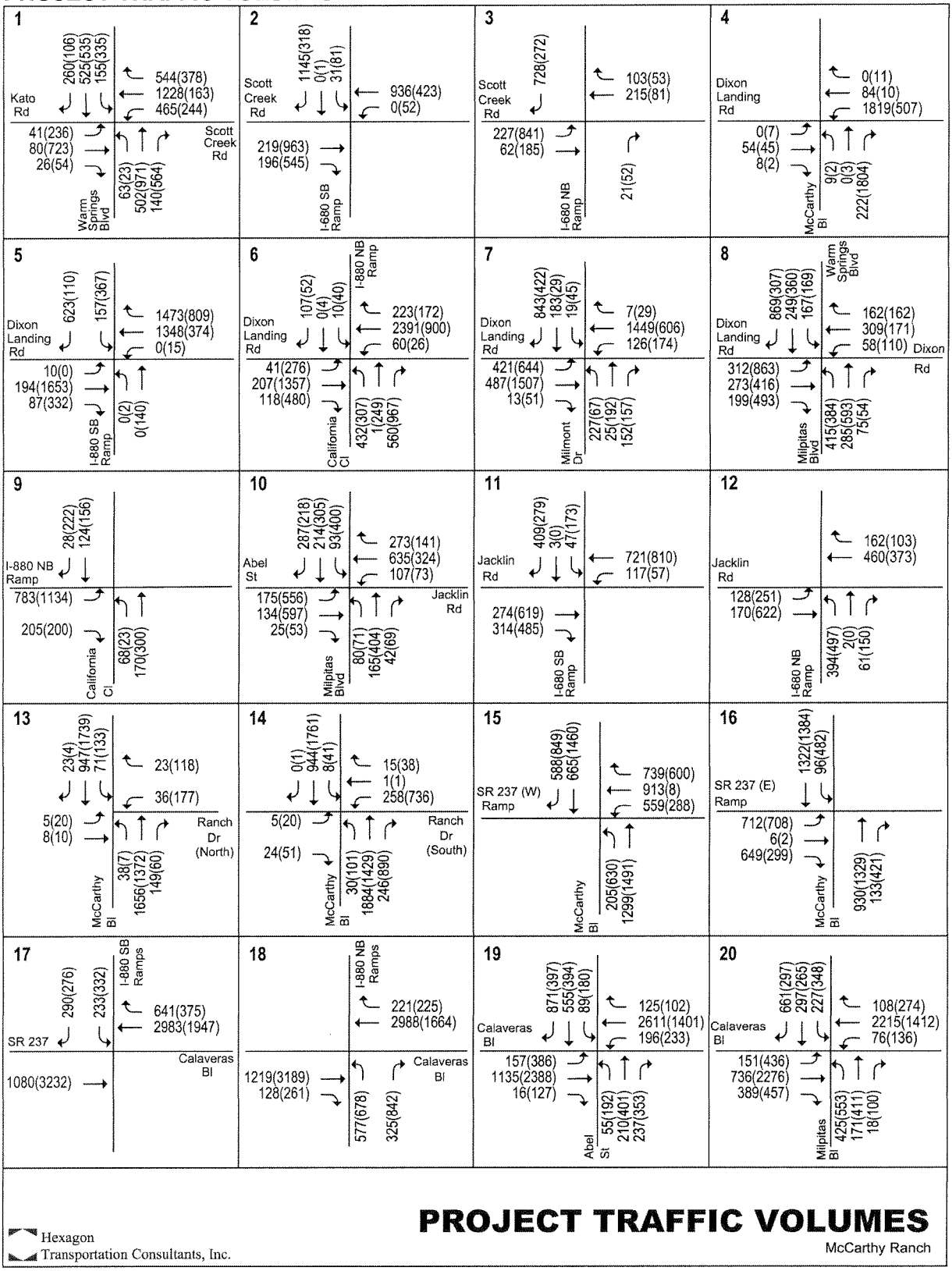


Figure 14.9 (continued)
PROJECT TRAFFIC VOLUMES

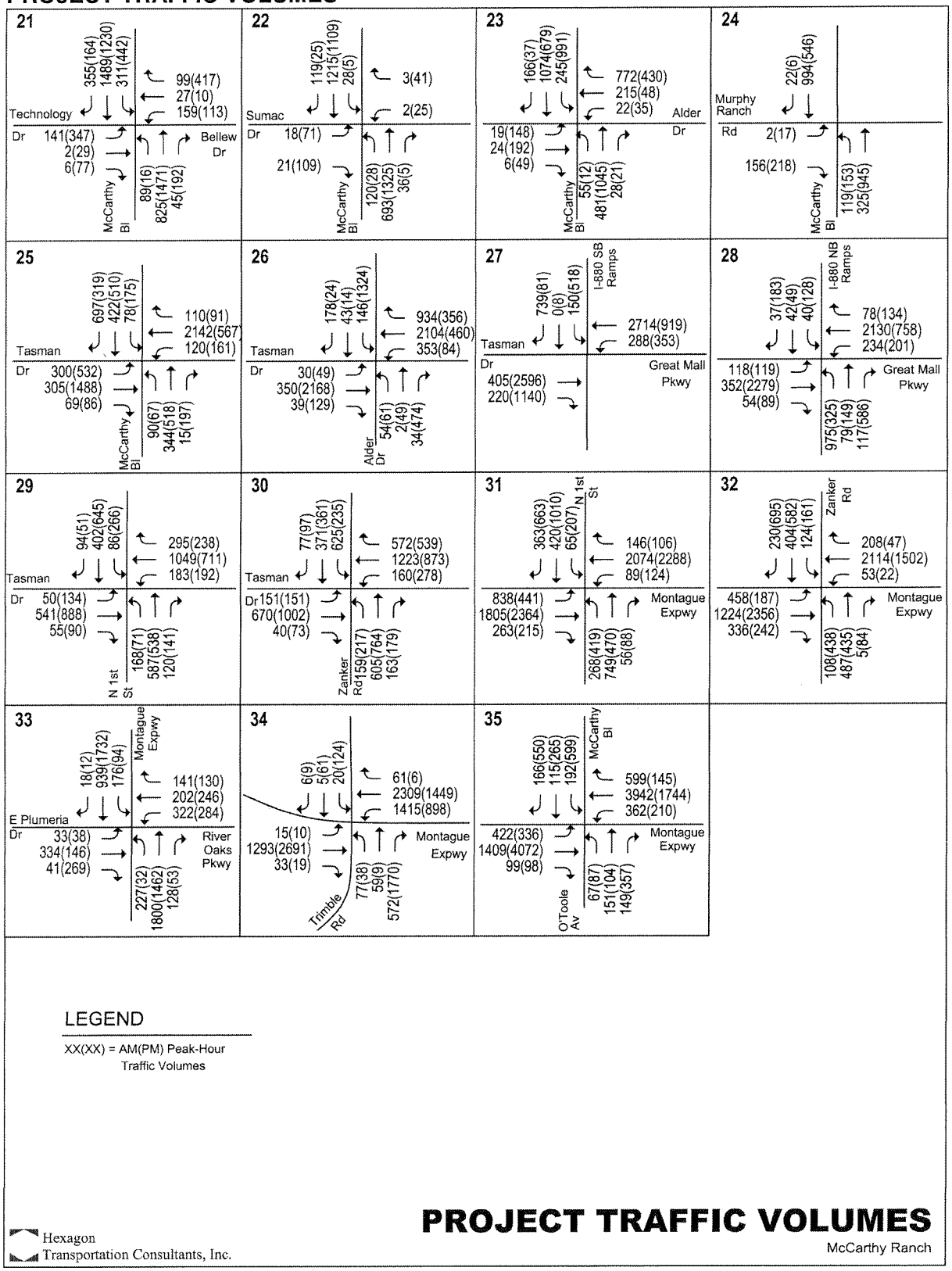


Table 14.9
INTERSECTION LEVELS OF SERVICE UNDER PROJECT CONDITIONS

	Peak Hour	Background Avg. Delay	Background LOS	Project Conditions Avg. Delay	Project Conditions LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1. Warm Springs Blvd & Kato Rd/Scott Creek Rd /a/	AM	29.1	C	28.5	C	-2.1	-0.01
	PM	36.6	D	37.3	D	1.2	0.03
2. SB 680 Ramps & Scott Creek Rd (unsignalized)	AM	0.6	A	0.6	A	0.0	0.00
	PM	2.9	A	2.9	A	0.0	0.00
3. NB 680 Ramps & Scott Creek Rd (unsignalized)	AM	3.5	A	3.7	A	0.2	0.00
	PM	7.0	A	7.7	A	0.8	0.00
4. McCarthy Blvd & Dixon Landing Rd	AM	7.8	A	12.2	B	5.1	0.33
	PM	8.3	A	18.1	B	26.1	0.42
5. SB 880 Ramps & Dixon Landing Rd /a/	AM	10.1	B	12.4	B	3.0	0.30
	PM	14.6	B	12.9	B	-1.4	0.11
6. NB 880 Ramps/California Cir & Dixon Landing Rd	AM	17.3	B	23.5	C	10.3	0.20
	PM	21.8	C	32.8	C	17.5	0.33
7. Milmont Drive & Dixon Landing Rd	AM	45.0	D	**56.0**	**E**	14.6	0.09
	PM	26.8	C	28.2	C	2.2	0.08
8. Warm Springs Blvd/Milpitas Blvd & Dixon Landing Rd	AM	37.1	D	53.4	D	25.5	0.16
	PM	45.7	D	54.8	D	18.9	0.10
9. California Cir & NB 880 Ramps /a/	AM	12.1	B	11.7	B	-0.7	0.10
	PM	14.6	B	14.9	B	0.4	0.04
10. Milpitas Blvd & Abel St/Jacklin Rd	AM	23.6	C	23.7	C	0.2	0.00
	PM	29.2	C	30.5	C	1.8	0.05
11. SB 680 Ramps & Jacklin Rd	AM	18.2	B	18.1	B	0.2	0.01
	PM	14.6	B	14.6	B	0.5	0.03
12. NB 680 Ramps & Jacklin Rd	AM	16.6	B	16.7	B	0.1	0.03
	PM	17.8	B	17.9	B	0.0	0.01
13. McCarthy Blvd & Ranch Drive (North)	AM	15.5	B	18.2	B	4.6	0.23
	PM	26.4	C	24.9	C	-5.8	0.10
14. McCarthy Blvd & Ranch Drive (South)	AM	14.5	B	16.4	B	5.0	0.22
	PM	20.7	C	24.2	C	7.4	0.22
15. McCarthy Blvd & WB 237 Ramps	AM	17.1	B	26.2	C	31.2	0.18
	PM	24.2	C	54.9	D	71.0	0.25
16. McCarthy Blvd & EB 237 Ramps /a/	AM	17.3	B	16.8	B	0.3	0.04
	PM	15.3	B	16.7	B	2.5	0.08
17. SB 880 Ramps & SR 237	AM	11.3	B	11.6	B	0.6	0.05
	PM	8.6	A	11.2	B	4.2	0.08
18. NB 880 Ramps & Calaveras Blvd /b/	AM	17.0	B	20.3	C	3.8	0.06
	PM	21.3	C	22.5	C	1.8	0.02

* Denotes CMP intersection

[ ] - Denotes project impact.

/a/ Average delay decreases under Project Conditions because of the addition of project trips to non-critical movements.

/b/ Project does not cause a significant impact at this intersection because the increase in critical movement delay at this intersection is < 4 seconds.

Bold font indicates unacceptable conditions

Table 14.9 (continued)
INTERSECTION LEVELS OF SERVICE UNDER PROJECT CONDITIONS

	Peak Hour	Background Avg. Delay	Background LOS	Project Conditions Avg. Delay	Project Conditions LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
19. Abel St & Calaveras Blvd*	AM	65.5	E	68.0	E	3.9	0.01
	PM	64.0	E	65.8	E	2.7	0.01
20. Milpitas Blvd & Calaveras Blvd*	AM	81.9	F	86.2	F	7.1	0.02
	PM	57.1	E	59.9	E	5.4	0.02
21. McCarthy Blvd & Technology Dr/Bellew Dr	AM	26.5	C	29.3	C	5.5	0.02
	PM	40.3	D	41.6	D	3.8	0.02
22. McCarthy Blvd & Sumac Dr (unsignalized)	AM	2.3	A	2.7	A	0.3	0.00
	PM	9.0	A	20.4	C	11.4	0.00
23. McCarthy Blvd & Alder Dr	AM	31.4	C	35.2	D	4.3	0.04
	PM	57.2	E	85.0	F	44.0	0.15
24. McCarthy Blvd & Murphy Ranch Rd (unsignalized) /a/	AM	2.4	A	2.3	A	-0.1	0.00
	PM	2.5	A	2.5	A	0.0	0.00
25. McCarthy Blvd & Tasman Dr	AM	79.2	E	82.1	F	4.9	0.01
	PM	43.9	D	44.7	D	0.9	0.03
26. Alder Dr & Tasman Dr	AM	17.2	B	18.3	B	4.2	0.05
	PM	87.3	F	113.8	F	34.0	0.08
27. SB 880 Ramps & Tasman Dr/Great Mall Pkwy	AM	23.8	C	24.0	C	0.3	0.02
	PM	36.3	D	45.0	D	29.0	0.09
28. NB 880 Ramps & Great Mall Pkwy /b/	AM	31.1	C	31.6	C	0.6	0.02
	PM	36.1	D	36.5	D	0.6	0.02
29. N 1st St & Tasman Dr /a/	AM	32.5	C	32.5	C	0.0	0.01
	PM	38.1	D	37.9	D	-0.1	0.01
30. Zanker Rd & Tasman Dr	AM	35.7	D	36.5	D	1.3	0.02
	PM	34.6	C	34.7	C	0.0	0.01
31. N 1st St & Montague Expwy* /b/	AM	56.0	E	55.9	E	0.1	0.00
	PM	127.2	F	128.9	F	3.1	0.01
32. Zanker Rd & Montague Expwy* /b/	AM	44.7	D	44.9	D	0.6	0.00
	PM	116.9	F	117.0	F	1.9	0.01
33. Montague Expwy & River Oaks Pkwy /a/	AM	46.0	D	45.9	D	-0.1	0.00
	PM	41.6	D	41.5	D	-0.1	0.00
34. Trimble Rd & Montague Expwy* /b/	AM	26.4	C	27.0	C	0.7	0.01
	PM	104.9	F	105.5	F	1.3	0.01
35. McCarthy Blvd/O'Toole Av & Montague Expwy* /b/	AM	53.1	D	56.4	E	5.3	0.02
	PM	111.7	F	115.1	F	2.9	0.01

* Denotes CMP intersection

[redacted] Denotes project impact

/b/ LOS for unsignalized intersection is based on worst leg.

/a/ Average delay decreases under Project Conditions because of the addition of project trips to non-critical movements.

[redacted] LOS calculated for the controlling movement(s), not a LOS reported.

/b/ Project does not cause a significant impact at this intersection because the increase in critical movement delay at this intersection is < 4 seconds.

Bold font indicates unacceptable conditions

- Milmont Drive/Dixon Landing Road,
- Milpitas Boulevard/Calaveras Boulevard,
- McCarthy Boulevard/Alder Drive,
- McCarthy Boulevard/Tasman Drive, and
- Alder Drive/Tasman Drive.

The project would not significantly increase delay at the other intersections that already operate at unacceptable levels under background conditions.

(c) Signal Warrants--Project Conditions. The peak hour signal warrant (Caltrans Traffic Manual, Chapter 9, Warrant 11) was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of Project Condition peak hour volumes. The analysis showed that the McCarthy Boulevard/Sumac Drive and McCarthy Boulevard/Murphy Ranch Road intersections would meet the signal warrant during the PM peak hour under Project Conditions. The other two unsignalized study intersections would not meet the peak hour volume warrant. The signal warrant analysis sheets are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

(d) Freeway Level of Service--Project Conditions. The results of the CMP freeway Project Conditions LOS analysis are summarized in Table 14.10. Traffic volumes on the study freeway segments under Project Conditions were estimated by adding project trips to the existing volumes obtained from the 2006 CMP Annual Monitoring Report. The results of the CMP freeway analysis show that the project would cause significant increases in traffic volumes (more than one percent of freeway capacity) on the following four directional freeway segments:

- I-880, northbound between SR 237 and Dixon Landing Road--PM peak hour,
- I-880, southbound between Great Mall Parkway and Montague Expressway--PM peak hour,
- I-880, southbound between Montague Expressway and Brokaw Road--PM peak hour, and
- SR 237, westbound between McCarthy Boulevard and Zanker Road--AM and PM peak hours.

14.3.4 Project Impacts and Mitigations

Impact 14-1: Project Impact on Milmont Drive/Dixon Landing Road Intersection. The intersection improvements assumed under Background Conditions would improve traffic operations at this intersection compared to the current configuration. However, with the project, the level of service would degrade from a LOS D to E and the average delay would increase from 45.0 seconds to 56.0 seconds during the AM peak hour. Based on City of Milpitas guidelines, this would constitute a ***significant impact*** [see criterion (a)(1) under subsection 14.3.1, Significance Criteria, above].

Table 14.10
FREEWAY LEVELS OF SERVICE UNDER PROJECT CONDITIONS

					Existing Plus Project Trips						Project Trips			
					Mixed-Flow							Mixed-Flow		
Freeway	Segment		Direction	Peak Hour	Ave. Speed/a/	# of Lanes	Capacity (vph)	Volume[1]	Density	LOS	Total Volume	Volume	% Capacity	Impact?
I-880	E. Brokaw Rd	to Montague Expwy	NB	AM	65	3	6,900	6,392	32.8	D	342	342	5.0%	*NO*
				PM	66	3	6,900	5,281	26.7	D	131	131	1.9%	*NO*
I-880	Montague Expwy	to Great Mall Pkwy	NB	AM	66	3	6,900	5,509	27.8	D	359	359	5.2%	*NO*
				PM	66	3	6,900	5,295	26.7	D	145	145	2.1%	*NO*
I-880	Great Mall Pkwy	to SR 237	NB	AM	65	3	6,900	6,431	33.0	D	381	381	5.5%	*NO*
				PM	47	3	6,900	6,646	47.1	E	156	156	2.3%	*NO*
I-880	SR 237	to Dixon Landing	NB	AM	62	4	8,280	7,722	34.6	D	342	342	4.1%	*NO*
				PM	11	4	8,280	4,316	109.0	F	126	126	1.5%	*YES*
SR 237	Zanker Rd	to McCarthy Blvd	EB	AM	66	2	4,400	3,876	29.4	D	446	446	10.1%	*NO*
				PM	52	2	4,400	4,491	43.2	D	121	121	2.8%	*NO*
I-880	Dixon Landing	to SR 237	SB	AM	48	4	9,200	7,399	38.5	D	59	59	0.6%	*NO*
				PM	66	4	9,200	5,489	20.8	C	329	329	3.6%	*NO*
I-880	SR 237	to Great Mall Pkwy	SB	AM	66	3	6,900	4,406	22.3	C	46	46	0.7%	*NO*
				PM	66	3	6,900	4,399	22.2	C	239	239	3.5%	*NO*
I-880	Great Mall Pkwy	to Montague Expwy	SB	AM	65	3	6,900	5,726	29.4	D	66	66	1.0%	*NO*
				PM	19	3	6,900	5,199	91.2	F	349	349	5.1%	*YES*
I-880	Montague Expwy	to E. Brokaw Rd	SB	AM	66	3	6,900	5,211	26.3	D	61	61	0.9%	*NO*
				PM	21	3	6,900	5,372	85.3	F	332	332	4.8%	*YES*
SR 237	McCarthy Blvd	to Zanker Rd	WB	AM	6	2	5,280	2,179	151.3	F	59	59	1.1%	*YES*
				PM	16	2	5,280	4,018	104.6	F	408	408	7.7%	*YES*

[1] Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2006.

Mitigation 14-1. Reconfigure the northbound Milmont Drive approach from one left turn lane, one through lane, and one right turn lane under Background Conditions to one left turn lane, one shared through left lane, and one right turn lane. This mitigation measure would allow the intersection to operate at LOS D (47.2 seconds of delay) during the AM peak hour and LOS C (27.5 seconds of delay) during the PM peak hour. Implementation of this measure would therefore reduce the impact to a ***less-than-significant level***.

Impact 14-2: Project Impact on Milpitas Boulevard/Calaveras Boulevard Intersection. The intersection of Milpitas Boulevard and Calaveras Boulevard would operate at LOS F (81.9 seconds of delay) under Background Conditions during the AM peak hour. Under Project Conditions, it would operate at LOS F (86.2 seconds of delay) with significant increases in critical-movement delay (7.1 seconds) and demand-to-capacity ratio (V/C). Based on the CMP guidelines, this would constitute a ***significant impact*** [see criterion (d) under subsection 14.3.1, Significance Criteria, above].

Mitigation 14-2. The 2030 Valley Transportation Plan (VTP) includes a range of highway and transit improvement projects to ease existing and future traffic congestion along major travel corridors in Santa Clara County. The widening of Calaveras Boulevard, between Milpitas Boulevard and I-880, is a high priority project and at least 80 percent of the funding for this improvement has been secured. The widening of Calaveras Boulevard at Milpitas Boulevard would result in converting the westbound right turn lane into a shared through/right turn lane. This mitigation measure would provide a third westbound through lane at this intersections and would improve the intersection operations from a LOS F (86.2 seconds of delay) to a LOS D (51.1 seconds of delay). This mitigation measure would reduce the significant impact to less than significant. Since the intersection would already operate at unacceptable traffic conditions under background conditions, the project shall pay a fair share contribution towards the cost of implementing this improvement. Implementation of this measure would reduce the impact to a ***less-than-significant level***.

Impact 14-3: Project Impact on McCarthy Boulevard/Alder Drive Intersection. The intersection of McCarthy Boulevard and Alder Drive would operate at LOS E (57.2 seconds of delay) under Background Conditions during the PM peak hour. Under Project Conditions, it would operate at LOS F (85.0 seconds of delay) with significant increases in critical-movement delay (44.0 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a ***significant impact*** [see criterion (a)(1) under subsection 14.3.1, Significance Criteria, above].

Mitigation 14-3. The new office development that has been approved for construction on the currently vacant parcel on the west side of the McCarthy Boulevard/Alder Drive intersection will add a fourth leg to this intersection to provide access to the site. Access to this new development will be via an exclusive northbound left-turn lane on McCarthy Boulevard and a westbound through lane on Alder Drive. Southbound traffic to this site would use the existing through lanes which will be converted to a shared through and right turn lane. After completion of these intersection improvements, this intersection will be built out. Under Background Conditions, this intersection would operate at unacceptable LOS during the PM peak-hour. The poor level of service is mainly attributable to the high southbound-to-eastbound left turn volumes. The intersection only provides one southbound left turn lane which is inadequate to accommodate future traffic volumes. Under Project Conditions, traffic operations at this intersection would further deteriorate to a level of service F during the PM peak-hour. Due to right-of-way constraints, adding a second southbound left-turn lane would not be feasible. Therefore, the project traffic impact at this intersection is considered ***significant and unavoidable***.

Impact 14-4: Project Impact on McCarthy Boulevard/Tasman Drive Intersection. The intersection of McCarthy Boulevard and Tasman Drive would operate at LOS E (79.2 seconds of delay) under Background Conditions during the AM peak hour. Under Project Conditions, it would operate at LOS F (82.1 seconds of delay) with significant increases in critical-movement delay (4.9 seconds) and volume-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a ***significant impact*** [see criterion (a)(2) under subsection 14.3.1, Significance Criteria, above].

Mitigation 14-4. The poor LOS at this intersection is primarily caused by the very high southbound right turn volumes during the AM peak-hour using a shared through-right turn lane. To mitigate this impact, convert the southbound shared through-right turn lane into a dedicated right turn lane. Implementation of this mitigation would return the LOS to D (50.4 seconds of delay) during the AM peak hour. Implementation of this measure would therefore reduce the impact to a ***less-than-significant level***.

Impact 14-5: Project Impact on Alder Drive/Tasman Drive Intersection. The intersection of Alder Drive and Tasman Drive would operate at LOS F (87.3 seconds of delay) under Background Conditions during the PM peak hour. Under Project Conditions, it would operate at LOS F (113.8 seconds of delay) with significant increases in critical-movement delay (34.0 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a ***significant impact*** [see criterion (a)(2) under subsection 14.3.1, Significance Criteria, above].

Mitigation 14-5. The poor LOS at this intersection is primarily caused by the very high southbound to eastbound left turn volumes during the PM peak-hour. Under Background Conditions, the left turn movement at this approach would be almost 1,100 vehicles per hour. With the project, this volume would increase to approximately 1,320 vehicles per hour. To mitigate this impact, a through lane on southbound Alder Drive could be converted into a left turn-lane. This mitigation would provide a total of three southbound left turn lanes on Alder Drive. Based on the level of service calculations, the implementation of this mitigation would return the LOS to E during the PM peak hour. However, adding a third southbound left turn lane on Alder Drive would not result in the desired benefits and create secondary effects that would result in additional undesirable impacts. The addition of a third left turn lane would result in merging issues and an imbalance of lane utilization for vehicles attempting to access the southbound and northbound ramps at the I-880 interchange. The triple left turn would also require the removal of an existing bicycle lane on Tasman Drive, east of Alder Drive. This would result in safety issues for cyclists heading eastbound on Tasman Drive. In addition, the bus stop on the south side of Tasman Drive, just east of the intersection with Alder Drive may have to be relocated. Considering these operational issues, the project traffic impact at the Alder Drive and Tasman Drive intersection is considered ***significant and unavoidable***.

Impact 14-6: Project Impact on Freeway Segments. The project would cause significant increases in traffic volumes (more than one percent of freeway capacity) on the following four directional freeway segments:

- I-880, northbound between SR 237 and Dixon Landing Road--PM peak hour,
- I-880, southbound between Great Mall Parkway and Montague Expressway--PM peak hour,
- I-880, southbound between Montague Expressway and Brokaw Road--PM peak hour, and

(continued)

Impact 14-6 (continued):

- SR 237, westbound between McCarthy Boulevard and Zanker Road--AM and PM peak hours.

According to the CMP guidelines these effects would constitute a ***significant impact*** [see criterion (e) under subsection 14.3.1, Significance Criteria, above].

Mitigation 14-6. Mitigation of significant project impacts on freeway segments would require roadway widening to construct additional through lanes, thereby increasing freeway capacity. Since it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements, and no comprehensive project to add through lanes has been developed by Caltrans or VTA for individual projects to contribute to, the significant impacts on the four directional freeway segments identified above are considered ***significant and unavoidable***.

14.3.5 Cumulative 2030 Traffic Conditions

(a) Travel Demand Model. This section describes roadway operational impacts that would occur under the Cumulative (2030) Condition. The analysis addresses projected year 2030 peak-hour roadway segment volumes and operational conditions without and with the project.

Projected cumulative year 2030 AM and PM peak hour volumes were developed using the Milpitas version of the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) year 2030 Travel Demand Forecast (TDF) model. The travel demand forecasts were based on year 2030 land use data and roadway network assumptions, with local land use data refinements to reflect existing and pending land use characteristics in the Milpitas area. The VTA model includes two traffic analysis zones to represent the proximate area west of I-880 between SR-237 and Dixon Landing Road. The local 2030 land use data refinements consisted primarily of added network and zonal detail along McCarthy Boulevard, plus the changed land use characteristics proposed for the pending approximately 524,000-square-foot Bayside Market Place Shopping Center development proposal (aka, Creekside project) which is located along the Fremont Boulevard extension north of Dixon Landing Road in Fremont.[1] In order to model existing and anticipated future developments along McCarthy Boulevard more accurately, the corridor was subdivided into a total of 13 additional traffic analysis zones.

A plot of the added traffic zones and the assumed 2030 roadway network in the area is included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section). A table with the more detailed year 2030 land use assumptions for each of the added zones is included in the

[1]The VTA travel demand model had previously assumed an industrial use of this site. For purposes of this McCarthy Ranch Mixed Use Project EIR cumulative impacts analysis, the model results were refined to reflect the currently pending 524,000 square-foot commercial shopping center proposal for this site.

Transportation Analysis Appendix. Year 2030 AM and PM peak hour trip tables were then developed with the refined VTA travel demand forecasting model. These trips were then assigned to the roadway network and the resulting traffic volumes determined for the major roadway segments in the project vicinity.

(b) 2030 Network Assumptions. The year 2030 roadway network includes many planned transportation improvements. Planned improvements that are included in the current VTA/Milpitas TDF model are those that have a high probability of receiving future funding. Within the project vicinity, the following planned improvements have been assumed for the year 2030 cumulative scenario:

- *I-880 Widening Projects.* It is assumed that I-880 will be widened to include a high occupancy vehicle lane and auxiliary lane in each direction from Montague Expressway north into Alameda County.

- *Fremont Boulevard Extension to Dixon Landing Road.* It is assumed that Fremont Boulevard will be extended southward from its current terminus near Lakeview Drive to Dixon Landing Road as part of the above-described Bayside Market Place project now pending in Fremont. It is assumed that the Fremont Boulevard extension will include two lanes in each direction, forming the fourth leg of the McCarthy Boulevard/Dixon Landing Road intersection.

- *Calaveras Boulevard.* Calaveras Boulevard will be widened to six lanes between Milpitas Boulevard and Abel Street. Operational improvements are also planned for intersections along Calaveras Boulevard between I-680 and I-880.

- *Montague Expressway.* Montague Expressway will be configured to provide eight mixed flow lanes between I-680 and I-880.

Planned improvements outside the project vicinity are described in the Valley Transportation Plan 2030, which is on file with the City of Milpitas and also available on VTA's website. It should be noted that some VTP-anticipated 2030 roadway improvement projects in the City of Milpitas have been identified for VTP 2030 funding. However, the City is still responsible for the 20 percent local match. Therefore, additional monetary contributions for these roadway improvement projects remain necessary and they have not been assumed under this scenario.

(c) Project Impact Criteria. Cumulative traffic operations at the study arterial roadway and freeway segments were evaluated based on volume-to-capacity ratio, correlated to LOS. Under Cumulative Conditions, the project would have a significant impact on a roadway or freeway segment if:

- the roadway or freeway segment is projected to operate below its LOS standard under the existing plan and under the proposed plan change is projected to cause an increase in traffic of at least one percent of its capacity; or

- the roadway or freeway segment is projected to operate at or better than its LOS standard under the existing plan and the proposed plan change is projected to degrade the level of service to less than acceptable levels.

On roadway segments under Cumulative Conditions, a project is said to benefit a roadway or freeway segment if:

- The roadway segment is projected to operate below its LOS standard under the existing plan and the proposed plan change is projected to cause a decrease in traffic of at least one percent of its capacity.

For CMP roadway segments, the minimum acceptable level of service is LOS E. At roadway segments in Milpitas that are not CMP roadway segments, the minimum acceptable level of service is LOS D. Figure 14.10 shows the roadway segments that were analyzed for this study.

(d) Year 2030 Cumulative Traffic Analysis Results. Year 2030 cumulative traffic conditions with the proposed project have been evaluated and compared to anticipated 2030 cumulative AM and PM peak hour traffic conditions without the project using the VTA travel demand forecasting model. Modeled 2030 cumulative traffic conditions with the project have assumed development of the project sites with office and commercial uses at 0.50 and 0.23 FARs, respectively. Modeled 2030 cumulative traffic conditions without the project have assumed development of the project sites with research and development uses at a 0.35 FAR consistent with existing zoning and the 1998 settlement agreement (see section 3.2.5 on page 3-8 in chapter 3, Project Description, herein). The results of the comparative forecasts are summarized in Tables 14.11 through 14.14. Each table shows the study roadway segments, the 2030 peak hour volumes for the with project and without project cumulative scenarios, the segment capacity, the associated volume-to-capacity ratios, the resulting levels of service, and whether the proposed project change (contribution) adversely impacts the roadways based on the impact significance criteria described in section 14.3.1 (Significance Criteria), subsection (f) and section 14.3.5 (Cumulative 2030 Traffic Conditions), subsection (c), above. Tables 14.11 and 14.12 present the results of the roadway segments analysis for the AM off-peak (northbound/eastbound) and AM peak (southbound/westbound) directions, respectively. Tables 14.13 and 14.14 show the same information for the PM peak hour. Note that the PM peak direction of travel (northbound/ eastbound) is the opposite of the AM peak direction (southbound/westbound).

As expected, many of the roadway segments would operate a LOS E or F by the year 2030 under the without project cumulative scenario . Even though the 2030 roadway network assumes several major roadway capacity improvements, the anticipated cumulative growth in jobs and housing under the no project scenario would cause the traffic to increase substantially and cause increased congestion on the transportation system. As shown in Tables 14.11 through 14.14, many roadway segments would operate at Level of Service E or F.

Changing the land use of the three project sites from research and development at a 0.35 FAR to office park at a 0.5 FAR and commercial land uses at 0.23 FAR would adversely impact the following roadway segments:

Figure 14.10
ROADWAY SEGMENTS

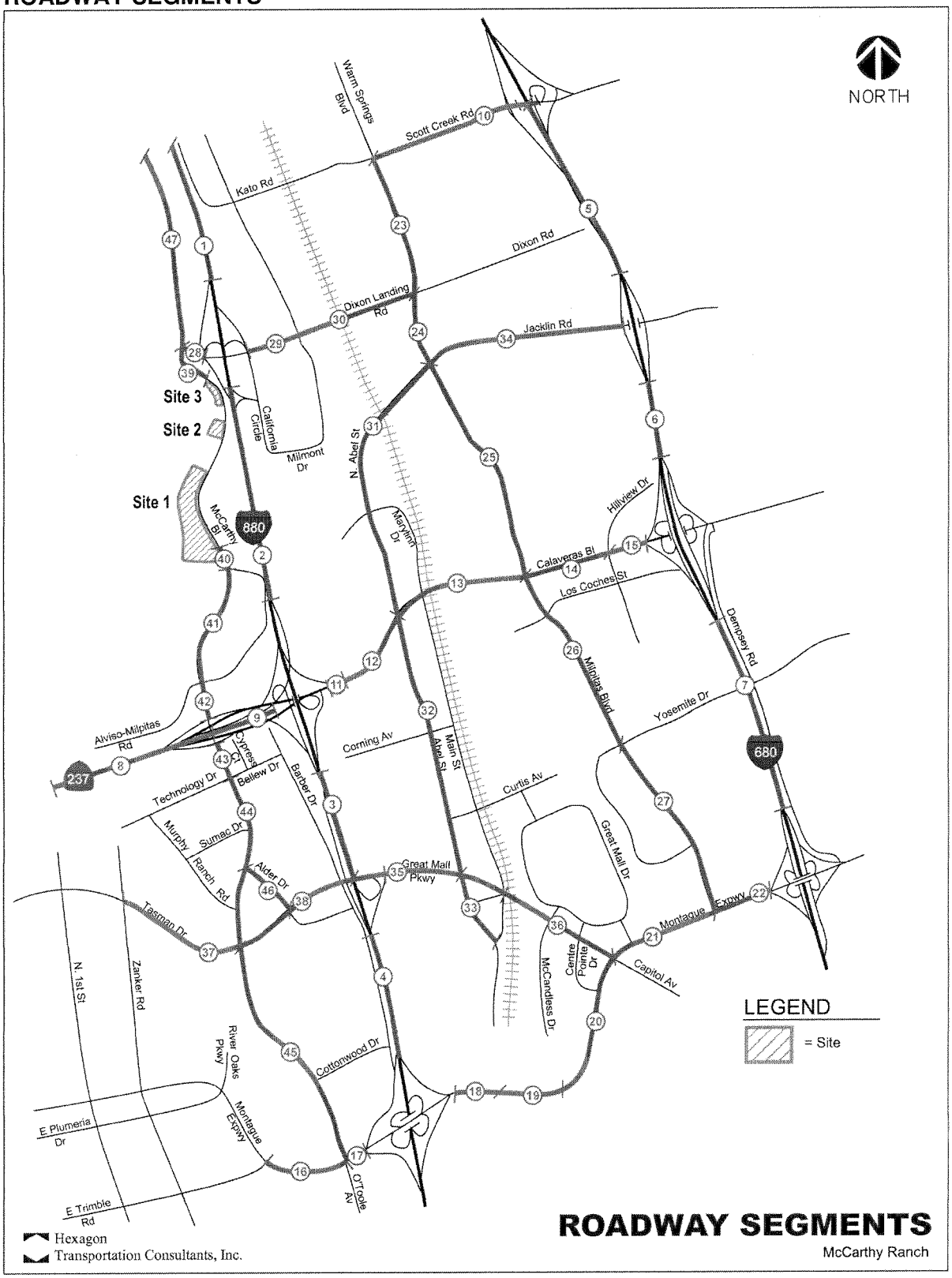


Table 14.11
YEAR 2030--NORTHBOUND/EASTBOUND AM PEAK HOUR VOLUMES AND LOS

Segment	From	To	LOS Standard	Volumes MR R&D @ 0.35 FAR	Volumes MR Project	Change abs	Change %	capacity	v/c MR R&D @ 0.35 FAR	v/c MR Project	LOS MR R&D @ 0.35 FAR	LOS MR Project	Adverse Impact ?
Interstate 880 *													
1	Mission Blvd	Dixon Landing Road	E	7,831	7,836	5	0.1%	10,000	0.78	0.78	C	C	no
2	Dixon Landing Road	Calaveras Boulevard	E	8,528	8,544	16	0.2%	8,000	1.07	1.07	F	F	no
3	Calaveras Boulevard	Great Mall Parkway	E	5,820	5,832	12	0.2%	6,000	0.97	0.97	E	E	no
4	Great Mall Parkway	Montague Expressway	E	6,885	6,907	22	0.3%	6,000	1.15	1.15	F	F	no
Interstate 680 *													
5	Scott Creek	Jacklin Road	E	7,571	7,571	0	0.0%	6,000	1.26	1.26	F	F	no
6	Jacklin Road	Calaveras Boulevard	E	5,703	5,703	0	0.0%	6,000	0.95	0.95	E	E	no
7	Calaveras Boulevard	Montague Expressway	E	8,681	8,686	5	0.1%	8,000	1.09	1.09	F	F	no
State Route 237 *													
8	Zanker Road	McCarthy Boulevard	E	3,851	3,885	34	0.9%	6,000	0.64	0.65	B	B	no
9	McCarthy Boulevard	I-880	E	2,170	2,170	0	0.0%	4,000	0.54	0.54	A	A	no
Scott Creek Road													
10	Warm Springs	I-680	D	888	888	0	0.0%	1,800	0.49	0.49	A	A	no
Calaveras Blvd *													
11	I-880	Abbott Avenue	E	1,797	1,798	1	0.1%	3,600	0.50	0.50	A	A	no
12	Abbott Avenue	Abel Avenue	E	1,843	1,844	1	0.1%	3,600	0.51	0.51	A	A	no
13	Abel Avenue	Milpitas Boulevard	E	1,024	1,024	0	0.0%	2,700	0.38	0.38	A	A	no
14	Milpitas Boulevard	Hillview Drive	E	746	746	0	0.0%	2,700	0.28	0.28	A	A	no
15	Hillview Drive	I-680	E	705	706	1	0.1%	2,700	0.26	0.26	A	A	no
Montague Expressway *													
16	Trimble Road	McCarthy Boulevard	E	2,892	2,895	3	0.1%	3,300	0.88	0.88	D	D	no
17	McCarthy Boulevard	I-880	E	2,296	2,296	0	0.0%	3,300	0.70	0.70	B	B	no
18	I-880	S. Main Street	E	2,688	2,688	0	0.0%	4,400	0.61	0.61	B	B	no
19	S. Main Street	McCandless Drive	E	2,273	2,273	0	0.0%	4,400	0.52	0.52	A	A	no
20	McCandless Drive	Great Mall Parkway	E	2,050	2,050	0	0.0%	4,400	0.47	0.47	A	A	no
21	Great Mall Parkway	S. Milpitas Boulevard	E	1,964	1,964	0	0.0%	4,400	0.45	0.45	A	A	no
22	S. Milpitas Boulevard	I-680	E	2,174	2,174	0	0.0%	4,400	0.49	0.49	A	A	no
Milpitas Boulevard													
23	Scott Creek Road	Dixon Landing Road	D	1,496	1,498	2	0.1%	1,800	0.83	0.83	D	D	no
24	Dixon Landing Road	Jacklin Road	D	1,866	1,875	9	0.5%	1,800	1.04	1.04	F	F	no
25	Jacklin Road	Calaveras Blvd.	D	857	860	3	0.3%	1,800	0.48	0.48	A	A	no
26	Calaveras Blvd.	Yosemite Drive	D	1,796	1,803	7	0.4%	1,800	1.00	1.00	E	F	no
27	Yosemite Drive	Montague Expressway	D	1,773	1,775	2	0.1%	1,800	0.99	0.99	E	E	no
Dixon Landing Road													
28	McCarthy Boulevard	I-880	D	1,020	1,040	20	1.9%	2,700	0.38	0.39	A	A	no
29	I-880	Milmont Drive	D	1,229	1,238	9	0.7%	1,800	0.68	0.69	B	B	no
30	Milmont Drive	N. Milpitas Boulevard	D	1,245	1,254	9	0.7%	1,800	0.69	0.70	B	B	no
Abel Street													
31	N. Milpitas Boulevard	Calaveras Blvd.	D	1,005	1,006	1	0.1%	1,800	0.56	0.56	A	A	no
32	Calaveras Blvd.	Great Mall Parkway	D	1,140	1,143	3	0.3%	1,800	0.63	0.64	B	B	no
33	Great Mall Parkway	S. Main Street	D	867	868	1	0.1%	1,800	0.48	0.48	A	A	no
Jacklin Road													
34	N. Milpitas Boulevard	I-680	D	675	677	2	0.3%	1,800	0.38	0.38	A	A	no
Great Mall Parkway													
35	I-880	S. Main Street	D	870	872	2	0.2%	2,700	0.32	0.32	A	A	no
36	S. Main Street	Montague Expressway	D	1,518	1,519	1	0.1%	2,700	0.56	0.56	A	A	no
Tasman Drive													
37	Zanker Road	McCarthy Boulevard	D	1,622	1,625	3	0.2%	2,700	0.60	0.60	B	B	no
38	McCarthy Boulevard	I-880	D	855	855	0	0.0%	2,700	0.32	0.32	A	A	no
McCarthy Boulevard													
39	Dixon Landing Road	Project	D	501	524	23	4.4%	1,800	0.28	0.29	A	A	no
40	Ranch Drive (North)	Project	D	874	970	96	9.9%	1,800	0.49	0.54	A	A	no
41	Ranch Drive (North)	Ranch Drive (South)	D	1,197	1,289	92	7.1%	1,800	0.67	0.72	B	C	no
42	Ranch Drive (South)	SR-237	D	1,715	1,806	91	5.0%	1,800	0.95	1.00	E	F	yes
43	SR-237	Bellew Drive	D	1,036	1,055	19	1.8%	1,800	0.58	0.59	A	A	no
44	Bellew Drive	Tasman Drive	D	1,044	1,056	12	1.1%	1,800	0.58	0.59	A	A	no
45	Tasman Drive	Montague Expressway	D	1,255	1,263	8	0.6%	1,800	0.70	0.70	B	C	no
Alder Drive													
46	McCarthy Boulevard	Tasman Drive	D	1,026	1,031	5	0.5%	1,800	0.57	0.57	A	A	no
Fremont Boulevard													
47	Dixon Landing Road	Lakeview Boulevard	D	966	969	3	0.3%	1,800	0.54	0.54	A	A	no

*** CMP Route.**

Table 14.12
YEAR 2030--SOUTHBOUND/WESTBOUND AM PEAK HOUR VOLUMES AND LOS

			LOS	Volumes		Change			v/c		LOS		Adverse
Segment	From	To	Standard	MR R&D @ 0.35 FAR	MR Project	abs	%	capacity	MR R&D @ 0.35 FAR	MR Project	MR R&D @ 0.35 FAR	MR Project	Impact ?
Interstate 880 *													
1	Mission Blvd	Dixon Landing Road	E	10,898	10,921	23	0.2%	10,000	1.09	1.09	F	F	no
2	Dixon Landing Road	Calaveras Boulevard	E	11,070	11,076	6	0.1%	8,000	1.38	1.38	F	F	no
3	Calaveras Boulevard	Great Mall Parkway	E	4,686	4,687	1	0.0%	6,000	0.78	0.78	C	C	no
4	Great Mall Parkway	Montague Expressway	E	6,264	6,268	4	0.1%	6,000	1.04	1.04	F	F	no
Interstate 680 *													
5	Scott Creek	Jacklin Road	E	7,543	7,544	1	0.0%	6,000	1.26	1.26	F	F	no
6	Jacklin Road	Calaveras Boulevard	E	5,701	5,702	1	0.0%	6,000	0.95	0.95	E	E	no
7	Calaveras Boulevard	Montague Expressway	E	8,219	8,220	1	0.0%	8,000	1.03	1.03	F	F	no
State Route 237 *													
8	Zanker Road	McCarthy Boulevard	E	8,096	8,101	5	0.1%	8,000	1.01	1.01	F	F	no
9	McCarthy Boulevard	I-880	E	5,477	5,478	1	0.0%	4,000	1.37	1.37	F	F	no
Scott Creek Road													
10	Warm Springs	I-680	D	1,937	1,941	4	0.2%	1,800	1.08	1.08	F	F	no
Calaveras Blvd *													
11	I-880	Abbott Avenue	E	3,088	3,107	19	0.6%	2,700	1.14	1.15	F	F	no
12	Abbott Avenue	Abel Avenue	E	2,962	2,981	19	0.6%	2,700	1.10	1.10	F	F	no
13	Abel Avenue	Milpitas Boulevard	E	3,156	3,167	11	0.3%	2,700	1.17	1.17	F	F	no
14	Milpitas Boulevard	Hillview Drive	E	2,449	2,455	6	0.2%	2,700	0.91	0.91	E	E	no
15	Hillview Drive	I-680	E	2,653	2,659	6	0.2%	2,700	0.98	0.98	E	E	no
Montague Expressway *													
16	Trimble Road	McCarthy Boulevard	E	4,359	4,360	1	0.0%	3,300	1.32	1.32	F	F	no
17	McCarthy Boulevard	I-880	E	4,573	4,579	6	0.1%	3,300	1.39	1.39	F	F	no
18	I-880	S. Main Street	E	5,904	5,910	6	0.1%	4,400	1.34	1.34	F	F	no
19	S. Main Street	McCandless Drive	E	5,845	5,850	5	0.1%	4,400	1.33	1.33	F	F	no
20	McCandless Drive	Great Mall Parkway	E	5,190	5,193	3	0.1%	4,400	1.18	1.18	F	F	no
21	Great Mall Parkway	S. Milpitas Boulevard	E	5,196	5,201	5	0.1%	4,400	1.18	1.18	F	F	no
22	S. Milpitas Boulevard	I-680	E	4,425	4,429	4	0.1%	4,400	1.01	1.01	F	F	no
Milpitas Boulevard													
23	Scott Creek Road	Dixon Landing Road	D	1,969	1,972	3	0.2%	1,800	1.09	1.10	F	F	no
24	Dixon Landing Road	Jacklin Road	D	1,728	1,733	5	0.3%	1,800	0.96	0.96	E	E	no
25	Jacklin Road	Calaveras Blvd.	D	1,102	1,104	2	0.2%	1,800	0.61	0.61	B	B	no
26	Calaveras Blvd.	Yosemite Drive	D	1,411	1,413	2	0.1%	1,800	0.78	0.79	C	C	no
27	Yosemite Drive	Montague Expressway	D	1,660	1,662	2	0.1%	1,800	0.92	0.92	E	E	no
Dixon Landing Road													
28	McCarthy Boulevard	I-880	D	2,210	2,271	61	2.7%	2,700	0.82	0.84	D	D	no
29	I-880	Milmont Drive	D	2,097	2,115	18	0.9%	1,800	1.17	1.18	F	F	no
30	Milmont Drive	N. Milpitas Boulevard	D	2,092	2,107	15	0.7%	1,800	1.16	1.17	F	F	no
Abel Street													
31	N. Milpitas Boulevard	Calaveras Blvd.	D	1,934	1,937	3	0.2%	1,800	1.07	1.08	F	F	no
32	Calaveras Blvd.	Great Mall Parkway	D	1,565	1,565	0	0.0%	1,800	0.87	0.87	D	D	no
33	Great Mall Parkway	S. Main Street	D	750	750	0	0.0%	1,800	0.42	0.42	A	A	no
Jacklin Road													
34	N. Milpitas Boulevard	I-680	D	1,553	1,560	7	0.4%	1,800	0.86	0.87	D	D	no
Great Mall Parkway													
35	I-880	S. Main Street	D	3,646	3,651	5	0.1%	2,700	1.35	1.35	F	F	no
36	S. Main Street	Montague Expressway	D	2,361	2,367	6	0.3%	2,700	0.87	0.88	D	D	no
Tasman Drive													
37	Zanker Road	McCarthy Boulevard	D	3,305	3,308	3	0.1%	2,700	1.22	1.23	F	F	no
38	McCarthy Boulevard	I-880	D	2,533	2,533	0	0.0%	2,700	0.94	0.94	E	E	no
McCarthy Boulevard													
39	Dixon Landing Road	Project	D	2,017	2,085	68	3.3%	1,800	1.12	1.16	F	F	yes
40	Ranch Drive (North)	Project	D	1,881	1,902	21	1.1%	1,800	1.05	1.06	F	F	yes
41	Ranch Drive (North)	Ranch Drive (South)	D	1,773	1,788	15	0.8%	1,800	0.99	0.99	E	E	no
42	Ranch Drive (South)	SR-237	D	1,925	1,941	16	0.8%	1,800	1.07	1.08	F	F	no
43	SR-237	Bellew Drive	D	2,012	2,021	9	0.4%	1,800	1.12	1.12	F	F	no
44	Bellew Drive	Tasman Drive	D	1,553	1,558	5	0.3%	1,800	0.86	0.87	D	D	no
45	Tasman Drive	Montague Expressway	D	1,311	1,313	2	0.2%	1,800	0.73	0.73	C	C	no
Alder Drive													
46	McCarthy Boulevard	Tasman Drive	D	240	244	4	1.6%	1,800	0.13	0.14	A	A	no
Fremont Boulevard													
47	Dixon Landing Road	Lakeview Boulevard	D	1,292	1,299	7	0.5%	1,800	0.72	0.72	C	C	no

*** CMP Route.**

Table 14.13
YEAR 2030--NORTHBOUND/EASTBOUND PM PEAK HOUR VOLUMES AND LOS

			LOS	Volumes		Change			v/c		LOS		Adverse
Segment	From	To	Standard	MR R&D @ 0.35 FAR	MR Project	abs	%	capacity	MR R&D @ 0.35 FAR	MR Project	MR R&D @ 0.35 FAR	MR Project	Impact ?
Interstate 880 *													
1	Mission Blvd	Dixon Landing Road	E	11,173	11,197	24	0.2%	10,000	1.12	1.12	F	F	no
2	Dixon Landing Road	Calaveras Boulevard	E	11,221	11,240	19	0.2%	8,000	1.40	1.41	F	F	no
3	Calaveras Boulevard	Great Mall Parkway	E	5,888	5,896	8	0.1%	6,000	0.98	0.98	E	E	no
4	Great Mall Parkway	Montague Expressway	E	7,668	7,679	11	0.1%	6,000	1.28	1.28	F	F	no
Interstate 680 *													
5	Scott Creek	Jacklin Road	E	8,523	8,523	0	0.0%	6,000	1.42	1.42	F	F	no
6	Jacklin Road	Calaveras Boulevard	E	6,288	6,288	0	0.0%	6,000	1.05	1.05	F	F	no
7	Calaveras Boulevard	Montague Expressway	E	8,897	8,898	1	0.0%	8,000	1.11	1.11	F	F	no
State Route 237 *													
8	Zanker Road	McCarthy Boulevard	E	8,038	8,050	12	0.1%	6,000	1.34	1.34	F	F	no
9	McCarthy Boulevard	I-880	E	4,868	4,871	3	0.1%	4,000	1.22	1.22	F	F	no
Scott Creek Road													
10	Warm Springs	I-680	D	2,337	2,341	4	0.2%	1,800	1.30	1.30	F	F	no
Calaveras Blvd *													
11	I-880	Abbott Avenue	E	4,244	4,263	19	0.4%	3,600	1.18	1.18	F	F	no
12	Abbott Avenue	Abel Avenue	E	4,011	4,029	18	0.4%	3,600	1.11	1.12	F	F	no
13	Abel Avenue	Milpitas Boulevard	E	3,363	3,375	12	0.4%	2,700	1.25	1.25	F	F	no
14	Milpitas Boulevard	Hillview Drive	E	2,747	2,756	9	0.3%	2,700	1.02	1.02	F	F	no
15	Hillview Drive	I-680	E	2,862	2,869	7	0.2%	2,700	1.06	1.06	F	F	no
Montague Expressway *													
16	Trimble Road	McCarthy Boulevard	E	4,504	4,506	2	0.0%	3,300	1.36	1.37	F	F	no
17	McCarthy Boulevard	I-880	E	4,489	4,490	1	0.0%	3,300	1.36	1.36	F	F	no
18	I-880	S. Main Street	E	5,855	5,859	4	0.1%	4,400	1.33	1.33	F	F	no
19	S. Main Street	McCandless Drive	E	5,688	5,693	5	0.1%	4,400	1.29	1.29	F	F	no
20	McCandless Drive	Great Mall Parkway	E	5,493	5,497	4	0.1%	4,400	1.25	1.25	F	F	no
21	Great Mall Parkway	S. Milpitas Boulevard	E	5,388	5,393	5	0.1%	4,400	1.22	1.23	F	F	no
22	S. Milpitas Boulevard	I-680	E	5,158	5,164	6	0.1%	4,400	1.17	1.17	F	F	no
Milpitas Boulevard													
23	Scott Creek Road	Dixon Landing Road	D	2,063	2,066	3	0.1%	1,800	1.15	1.15	F	F	no
24	Dixon Landing Road	Jacklin Road	D	1,997	2,001	4	0.2%	1,800	1.11	1.11	F	F	no
25	Jacklin Road	Calaveras Blvd.	D	1,271	1,271	0	0.0%	1,800	0.71	0.71	C	C	no
26	Calaveras Blvd.	Yosemite Drive	D	1,545	1,546	1	0.1%	1,800	0.86	0.86	D	D	no
27	Yosemite Drive	Montague Expressway	D	1,689	1,689	0	0.0%	1,800	0.94	0.94	E	E	no
Dixon Landing Road													
28	McCarthy Boulevard	I-880	D	1,451	1,516	65	4.3%	2,700	0.54	0.56	A	A	no
29	I-880	Milmont Drive	D	2,300	2,315	13	0.6%	1,800	1.28	1.29	F	F	no
30	Milmont Drive	N. Milpitas Boulevard	D	2,139	2,151	12	0.6%	1,800	1.19	1.20	F	F	no
Abel Street													
31	N. Milpitas Boulevard	Calaveras Blvd.	D	1,983	1,987	4	0.2%	1,800	1.10	1.10	F	F	no
32	Calaveras Blvd.	Great Mall Parkway	D	1,780	1,788	8	0.4%	1,800	0.99	0.99	E	E	no
33	Great Mall Parkway	S. Main Street	D	506	506	0	0.0%	1,800	0.28	0.28	A	A	no
Jacklin Road													
34	N. Milpitas Boulevard	I-680	D	1,805	1,808	3	0.2%	1,800	1.00	1.00	F	F	no
Great Mall Parkway													
35	I-880	S. Main Street	D	3,621	3,638	17	0.5%	2,700	1.34	1.35	F	F	no
36	S. Main Street	Montague Expressway	D	2,686	2,695	9	0.3%	2,700	0.99	1.00	E	E	no
Tasman Drive													
37	Zanker Road	McCarthy Boulevard	D	3,311	3,314	3	0.1%	2,700	1.23	1.23	F	F	no
38	McCarthy Boulevard	I-880	D	2,556	2,557	1	0.0%	2,700	0.95	0.95	E	E	no
McCarthy Boulevard													
39	Dixon Landing Road	Project	D	1,964	2,040	76	3.7%	1,800	1.09	1.13	F	F	yes
40	Ranch Drive (North)	Project	D	1,893	1,929	36	1.9%	1,800	1.05	1.07	F	F	yes
41	Ranch Drive (North)	Ranch Drive (South)	D	1,720	1,740	20	1.1%	1,800	0.96	0.97	E	E	yes
42	Ranch Drive (South)	SR-237	D	2,141	2,164	23	1.1%	1,800	1.19	1.20	F	F	yes
43	SR-237	Bellew Drive	D	2,299	2,307	8	0.3%	1,800	1.28	1.28	F	F	no
44	Bellew Drive	Tasman Drive	D	1,706	1,711	5	0.3%	1,800	0.95	0.95	E	E	no
45	Tasman Drive	Montague Expressway	D	1,543	1,546	3	0.2%	1,800	0.86	0.86	D	D	no
Alder Drive													
46	McCarthy Boulevard	Tasman Drive	D	483	484	1	0.2%	1,800	0.27	0.27	A	A	no
Fremont Boulevard													
47	Dixon Landing Road	Lakeview Boulevard	D	1,550	1,561	11	0.7%	1,800	0.86	0.87	D	D	no

*** CMP Route.**

Table 14.14
YEAR 2030--SOUTHBOUND/WESTBOUND PM PEAK HOUR VOLUMES AND LOS

Segment	From	To	LOS Standard	Volumes: MR R&D @ 0.35 FAR	Volumes: MR Project	Change: abs	Change: %	capacity	v/c: MR R&D @ 0.35 FAR	v/c: MR Project	LOS: MR R&D @ 0.35 FAR	LOS: MR Project	Adverse Impact ?
Interstate 880 *													
1	Mission Blvd	Dixon Landing Road	E	9,646	9,655	9	0.1%	10,000	0.96	0.97	E	E	no
2	Dixon Landing Road	Calaveras Boulevard	E	9,792	9,810	18	0.2%	8,000	1.22	1.23	F	F	no
3	Calaveras Boulevard	Great Mall Parkway	E	5,687	5,702	15	0.3%	6,000	0.95	0.95	E	E	no
4	Great Mall Parkway	Montague Expressway	E	7,783	7,807	24	0.3%	6,000	1.30	1.30	F	F	no
Interstate 680 *													
5	Scott Creek	Jacklin Road	E	8,341	8,341	0	0.0%	6,000	1.39	1.39	F	F	no
6	Jacklin Road	Calaveras Boulevard	E	6,483	6,483	0	0.0%	6,000	1.08	1.08	F	F	no
7	Calaveras Boulevard	Montague Expressway	E	9,815	9,821	6	0.1%	8,000	1.23	1.23	F	F	no
State Route 237 *													
8	Zanker Road	McCarthy Boulevard	E	5,487	5,523	36	0.7%	8,000	0.69	0.69	B	B	no
9	McCarthy Boulevard	I-880	E	3,290	3,291	1	0.0%	4,000	0.82	0.82	D	D	no
Scott Creek Road													
10	Warm Springs	I-680	D	1,251	1,252	1	0.1%	1,800	0.70	0.70	B	B	no
Calaveras Blvd *													
11	I-880	Abbott Avenue	E	2,578	2,588	10	0.4%	2,700	0.95	0.96	E	E	no
12	Abbott Avenue	Abel Avenue	E	2,563	2,573	10	0.4%	2,700	0.95	0.95	E	E	no
13	Abel Avenue	Milpitas Boulevard	E	1,823	1,825	2	0.1%	2,700	0.68	0.68	B	B	no
14	Milpitas Boulevard	Hillview Drive	E	1,329	1,330	1	0.1%	2,700	0.49	0.49	A	A	no
15	Hillview Drive	I-680	E	1,165	1,166	1	0.1%	2,700	0.43	0.43	A	A	no
Montague Expressway *													
16	Trimble Road	McCarthy Boulevard	E	3,189	3,196	7	0.2%	3,300	0.97	0.97	E	E	no
17	McCarthy Boulevard	I-880	E	2,280	2,281	1	0.0%	3,300	0.69	0.69	B	B	no
18	I-880	S. Main Street	E	3,108	3,109	1	0.0%	4,400	0.71	0.71	C	C	no
19	S. Main Street	McCandless Drive	E	2,786	2,787	1	0.0%	4,400	0.63	0.63	B	B	no
20	McCandless Drive	Great Mall Parkway	E	2,855	2,856	1	0.0%	4,400	0.65	0.65	B	B	no
21	Great Mall Parkway	S. Milpitas Boulevard	E	2,762	2,763	1	0.0%	4,400	0.63	0.63	B	B	no
22	S. Milpitas Boulevard	I-680	E	2,732	2,733	1	0.0%	4,400	0.62	0.62	B	B	no
Milpitas Boulevard													
23	Scott Creek Road	Dixon Landing Road	D	1,689	1,691	2	0.1%	1,800	0.94	0.94	E	E	no
24	Dixon Landing Road	Jacklin Road	D	2,121	2,126	5	0.2%	1,800	1.18	1.18	F	F	no
25	Jacklin Road	Calaveras Blvd.	D	1,258	1,261	3	0.2%	1,800	0.70	0.70	B	C	no
26	Calaveras Blvd.	Yosemite Drive	D	1,869	1,874	5	0.3%	1,800	1.04	1.04	F	F	no
27	Yosemite Drive	Montague Expressway	D	1,851	1,853	2	0.1%	1,800	1.03	1.03	F	F	no
Dixon Landing Road													
28	McCarthy Boulevard	I-880	D	844	889	45	5.1%	2,700	0.31	0.33	A	A	no
29	I-880	Milmont Drive	D	1,582	1,593	11	0.7%	1,800	0.88	0.89	D	D	no
30	Milmont Drive	N. Milpitas Boulevard	D	1,422	1,431	9	0.6%	1,800	0.79	0.80	C	C	no
Abel Street													
31	N. Milpitas Boulevard	Calaveras Blvd.	D	1,205	1,206	1	0.1%	1,800	0.67	0.67	B	B	no
32	Calaveras Blvd.	Great Mall Parkway	D	1,517	1,520	3	0.2%	1,800	0.84	0.84	D	D	no
33	Great Mall Parkway	S. Main Street	D	1,107	1,108	1	0.1%	1,800	0.62	0.62	B	B	no
Jacklin Road													
34	N. Milpitas Boulevard	I-680	D	986	988	2	0.2%	1,800	0.55	0.55	A	A	no
Great Mall Parkway													
35	I-880	S. Main Street	D	1,340	1,341	1	0.1%	2,700	0.50	0.50	A	A	no
36	S. Main Street	Montague Expressway	D	1,590	1,593	3	0.2%	2,700	0.59	0.59	A	A	no
Tasman Drive													
37	Zanker Road	McCarthy Boulevard	D	2,396	2,405	9	0.4%	2,700	0.89	0.89	D	D	no
38	McCarthy Boulevard	I-880	D	1,505	1,505	0	0.0%	2,700	0.56	0.56	A	A	no
McCarthy Boulevard													
39	Dixon Landing Road	Project	D	820	870	50	5.7%	1,800	0.46	0.48	A	A	no
40	Ranch Drive (North)	Project	D	1,196	1,310	114	8.7%	1,800	0.66	0.73	B	C	no
41	Ranch Drive (North)	Ranch Drive (South)	D	1,444	1,545	101	6.5%	1,800	0.80	0.86	D	D	no
42	Ranch Drive (South)	SR-237	D	1,995	2,095	100	4.8%	1,800	1.11	1.16	F	F	yes
43	SR-237	Bellew Drive	D	1,801	1,845	44	2.4%	1,800	1.00	1.03	F	F	yes
44	Bellew Drive	Tasman Drive	D	1,261	1,279	18	1.4%	1,800	0.70	0.71	C	C	no
45	Tasman Drive	Montague Expressway	D	1,342	1,350	8	0.6%	1,800	0.75	0.75	C	C	no
Alder Drive													
46	McCarthy Boulevard	Tasman Drive	D	1,398	1,416	18	1.3%	1,800	0.78	0.79	C	C	no
Fremont Boulevard													
47	Dixon Landing Road	Lakeview Boulevard	D	1,014	1,018	4	0.4%	1,800	0.56	0.57	A	A	no

*** CMP Route.**

- **AM Peak Hour**

  39. McCarthy Boulevard (southbound), between Dixon Landing Road and Project,

  40. McCarthy Boulevard (southbound), between Ranch Drive (north) and Project, and

  42. McCarthy Boulevard (northbound), between Ranch Drive (south) and SR-237;

- **PM Peak Hour**

  39. McCarthy Boulevard (northbound), between Dixon Landing Road and Project,

  40. McCarthy Boulevard (northbound), between Ranch Drive (north) and Project,

  41. McCarthy Boulevard (northbound), between Ranch Drive (north) and Ranch Drive (South),

  42. McCarthy Boulevard (northbound and southbound), between Ranch Drive (south) and SR-237, and

  43. McCarthy Boulevard (southbound), between SR-237 and Bellew Drive.

Impact 14-7: Year 2030 Cumulative Plus Project Impacts on McCarthy Boulevard Roadway Segments. Several roadway segments of McCarthy Boulevard between Bellew Drive and Dixon Landing Road would operate at LOS F under anticipated 2030 cumulative conditions without the project-proposed land use changes during the AM and PM peak hours. With the project-proposed land use changes, these segments would continue to operate at LOS F, but with significant increases in volume-to-capacity ratios. According to the Milpitas significance criteria this would constitute a ***significant impact*** [see criterion (a)(2) under subsection 14.3.1, Significance Criteria, above]**.**

Mitigation 14-7. Mitigation of the significant cumulative plus project impacts on these segments of McCarthy Boulevard would require roadway widening to construct additional through lanes, thereby increasing roadway capacity. Since it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements, and no comprehensive improvement program to add through lanes has been developed for individual projects to contribute to, the project contributions to significant cumulative impacts on the McCarthy Ranch roadway segments identified are considered ***significant and unavoidable.***

(continued)

Mitigation 14-7 (continued):

Although the project effects on cumulative conditions along these roadway segments have been identified as significant and unavoidable, the following measure is described to ensure that future impacts are minimized to the extent feasible: the City of Milpitas shall require individual developments in the project vicinity, including the proposed project, to identify and implement improvements and/or TSM programs that will ensure the best possible traffic operations given the capacity limitations of the roadway segments.

15. PROJECT CONSISTENCY WITH ADOPTED PLANS AND POLICIES

Section 15125(d) of the California Environmental Quality Act (CEQA) Guidelines requires EIRs to "...discuss any inconsistencies between the proposed project and applicable general plans and regional plans." The Guidelines indicate that the objective of this discussion is to identify possible modifications to the project to reduce any inconsistencies with relevant plans and policies.

15.1 CITY OF MILPITAS GENERAL PLAN AND ZONING ORDINANCE

15.1.1 Project General Plan Amendment and Rezoning Requirements

The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres. The three properties are currently designated *Industrial Park and Manufacturing* on the Milpitas General Plan Land Use Map and zoned *Industrial Park* (MP) with a maximum floor area ratio (FAR) of 0.50.

In 1986, the City annexed the approximately 421-acre portion of the McCarthy Ranch area bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road and certified an associated *Milpitas Business Park Phase III EIR* (1986 EIR) and approved an *Industrial Park and Manufacturing* General Plan designation, MP (Industrial Park) zoning designation and associated McCarthy Ranch Master Plan for development of the area, establishing a maximum permitted FAR of 0.50. In 1993, the City approved an Addendum to the 1986 EIR (1993 EIR Addendum) and approved a General Plan amendment (GPA), rezoning and tentative map for the southern portion of the 1986 annexation, permitting development of the McCarthy Ranch Marketplace project. In 1997, the City certified a new EIR (1997 EIR) and approved a GPA establishing a new Mixed Use (MX) designation and associated rezoning, updated McCarthy Ranch Master Plan and Design Guidelines submittal, and development agreement, that together specified an updated, mixed use development program for the approximately 203-acre undeveloped remainder of the McCarthy Ranch annexation area (Master Plan area), including the three project sites.

In 1998, the City of San Jose, Santa Clara Audubon Society and others took joint legal action to prevent development under the 1997 MX designation, arguing that it would be incompatible with adjacent conditions (i.e., the Santa Clara/San Jose Water Pollution Control Plant, Newby Island Landfill, and habitat values along Coyote Creek). A subsequent settlement agreement permitted development of the Master Plan area if it was re-designated back to non-residential use (Industrial Park and Manufacturing), and established that the City of San Jose would not object to subsequent development of non-residential uses under this re-designation provided that such development did not exceed an FAR of 0.35.

In 1999, in response to the 1997 settlement agreement and a subsequent new application, the City certified a Supplemental EIR (1999 SEIR), tiered upon the 1997 EIR, and approved a GPA, rezoning and associated entitlements changing the land use designation from MX (Mixed Use)

back to MP (Industrial Park) with a maximum permitted FAR of 0.50, and with an SEIR stipulation that any proposed increase in FAR beyond 0.35 "would require additional environmental review."

The project now proposes to (1) amend the Milpitas General Plan to change the land use designation for project site C from *Manufacturing and Warehousing* to *General Commercial*, and (2) rezone site C from *Industrial Park* (MP) to *General Commercial* (C2).

The project-proposed General Plan Amendment and rezoning for site C, along with the resulting development of office park and commercial uses on sites A, B and C, would not conflict with applicable local or regional land use plans, policies, or regulations. The proposed office park use of sites A and B would be consistent with the existing Milpitas General Plan *Industrial Park* designation and Milpitas Zoning Ordinance *Industrial Park* (MP) district designation for the two sites. The proposed General Plan Amendment and rezoning and resulting general commercial use of site C would not produce any conflicts with applicable land use plans, policies or regulations. In general, the project would further Milpitas General Plan policies that call for economic development and urban infill within the city limits.

The existing *Industrial Park* (MP) zoning for sites A and B and the proposed *General Commercial* (C2) zoning for site C allow a maximum FAR of 0.50. The proposed development of sites A and B up to a maximum FAR of 0.50 and site C up to a maximum FAR of 0.23 would therefore also be consistent with applicable land use plans, policies and regulations. The environmental impacts of this level of development, including development on sites A and B that exceeds the 0.35 FAR stipulated in the 1998 settlement agreement, are fully addressed in this EIR (including chapter 4, Aesthetics; chapter 5, Air Quality; chapter 11, Land Use and Agriculture; chapter 12, Noise; chapter 13, Public Services, Utilities and Service Systems; and chapter 14, Transportation and Circulation).

15.1.2 Project Consistency with Other Pertinent General Plan Policies

In addition to the General Plan land use designation for the project site, project consistency with other relevant General Plan principles and implementing policies pertinent to environmental issues has been evaluated in chapters 4 through 14 of this EIR as part of the impact analysis for each environmental topic area (aesthetics, air quality and climate change, biological resources, cultural resources, etc.). Throughout chapters 4 through 14, relevant General Plan principles and policies have been listed and have been considered as criteria for determining the significance of environmental impacts. Where an apparent substantial inconsistency between the project and a General Plan environmental policy has been determined, a significant adverse environmental impact has been identified, and mitigation measures have been recommended to reduce or eliminate the identified inconsistency.

15.2 PERTINENT REGIONAL PLANS

15.2.1 ABAG's Regional Land Use Policy Framework

The most recent regional land use policy document adopted by the Association of Bay Area Governments (ABAG) is entitled A Proposed Land Use Policy Framework for the San Francisco Bay Area (adopted by the ABAG Executive Board in July 1990). The document is described as a regional policy framework for future land use decisions in the Bay Area that respects the need

for strong local control, but that also recognizes the importance of regional comprehensive planning for issues of regional significance. The document contains policies that: (1) direct growth where regional infrastructure (e.g., freeways, transit, water, solid waste disposal, sewage treatment) is available and natural resources will not be overburdened; (2) encourage development that discourages long-distance commuting; and (3) call for the establishment of firm growth boundaries. The proposed project is consistent with this policy framework--i.e., is within the existing Milpitas city limits, is served by established municipal infrastructure and is convenient to existing transit services.

15.2.2 Regional Clean Air Plan

The policies of the Bay Area Air Quality Management District (BAAQMD) Clean Air Plan call for consideration of traffic-related air quality impacts in the review of development projects. Specifically, the BAAQMD calls for such air quality effects to be analyzed in environmental impact reports on such projects, subject to BAAQMD review. Chapter 5 (Air Quality and Climate Change) of this EIR provides an analysis of air quality impacts, and also discusses the proposed McCarthy Ranch Mixed Use Project's relationship to BAAQMD significance thresholds. Based on the projected vehicle miles traveled associated with project buildout, the project contribution to a *cumulative* regional emissions impact (Impact 5-2: Project Long-Term Regional Air Emissions Impact) would be significant and unavoidable.

15.2.3 Santa Clara County Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) is the state-designated Congestion Management Agency (CMA) for Santa Clara County that sets state and federal funding priorities for improvements affecting its San Mateo County Congestion Management Program (CMP) designated regional roadway system (see section 14.1.1(c) of this EIR). Chapter 14 (Transportation and Circulation) of this EIR has been prepared in a manner consistent with the requirements of the CMP and VTA guidelines.

16. CEQA-REQUIRED ASSESSMENT CONSIDERATIONS

This chapter summarizes the EIR findings in terms of the various assessment categories suggested by the California Environmental Quality Act (CEQA) Guidelines for EIR content. The findings of this EIR regarding the proposed project are summarized below in terms of potential "growth-inducing effects," "significant unavoidable impacts," "irreversible environmental changes," and "cumulative impacts."

16.1 GROWTH-INDUCING IMPACTS

CEQA Guidelines section 15126.2(d) requires that the EIR discuss *"...the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."*

The proposed McCarthy Ranch Mixed Use Project provides for development of the three project sites (A, B and C) with a total of 1,071,470 square feet of office park floor area and 93,580 square feet of community shopping center floor area. These maximum floor area totals would fall within currently-established FAR maximums for the three sites.

Neither the proposed project, including the proposed General Plan amendment and rezoning of site C, nor any of the mitigation measures identified in this EIR, would require the provision of new or physically altered governmental or public facilities for fire protection, police protection, schools, parks, water supply and service, wastewater treatment, storm drainage, solid waste service, or other public facilities which could foster economic or population growth beyond what is currently anticipated under the Milpitas General Plan and Zoning Ordinance.

The project would represent "infill" development and would be subject to the established development regulations, standards, and requirements of the City of Milpitas (including the General Plan, Zoning Ordinance, and other Municipal Code provisions) and other responsible agencies. No substantial, detrimental growth-inducing effect is expected.

16.2 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines section 15126.2(b) requires that the EIR discuss *"significant environmental effects which cannot be avoided if the proposed project is implemented."* Significant unavoidable impacts are those that would not be reduced to less-than-significant levels by the mitigation measures recommended in this EIR.

Mitigation measures have been identified in this EIR to reduce identified significant and potentially significant effects associated with the proposed McCarthy Ranch Mixed Use Project to less-than-significant levels, with the exception of the following identified significant unavoidable impacts:

- ***Impact 5-2: Project Long-Term Regional Air Emissions Impact;***
- ***Impact 5-3: Project Climate Change Impacts;***
- ***Impact 14-3: Project Impact on McCarthy Boulevard/Alder Drive Intersection;***
- ***Impact 14-5: Project Impact on Alder Drive/Tasman Drive Intersection;***
- ***Impact 14-6: Project Impact on Freeway Segments; and***
- ***Impact 14-7: Project Plus 2030 Cumulative Impact on McCarthy Boulevard Roadway Segments.***

16.3 IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines section 15126.2(c) requires that the EIR discuss *"significant irreversible environmental changes which would be caused by the proposed project should it be implemented."* Irreversible environmental changes caused by the proposed McCarthy Ranch Mixed Use Project would include the following:

- the project would permanently alter on-site and off-site views of and through the project site, as discussed in chapter 4 (Aesthetics) of this EIR;
- the project may result in an irreversible disturbance or loss of an as yet unrecorded archaeological resource, as discussed in chapter 7 of this EIR; and
- the project would permanently change the land use of the three project sites from agriculture (row crops, etc.) to urban (office park and community commercial) use.

16.4 CUMULATIVE IMPACTS

Section 15130(a) of the CEQA Guidelines requires that the EIR *"discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable...."* The CEQA Guidelines (section 15355) define "cumulative impacts" as *"...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."*

Other foreseeable (recently completed, under construction, recently approved, or pending) development projects in the project vicinity are identified in chapters 11 (Land Use and Agriculture) and 14 (Transportation and Circulation) of this EIR. In conjunction with these foreseeable projects, the project would contribute substantially to the following significant cumulative impacts:

- ***Impact 5-2: Project and Cumulative Long-Term Regional Air Emissions Impact;***
- ***Impact 5-3: Project and Cumulative Climate Change Impact;***

- ***Impact 13-1: Project and Cumulative Impacts on Sewage Treatment and Transmission Capacity; and***

- ***Impact 14-7: Project Plus 2030 Cumulative Impacts on McCarthy Boulevard Roadway Segments.***

This EIR recommends mitigation measures that would reduce the project's contribution to cumulative Impact 13-1 (sewage treatment and transmission capacity) above to a less-than-significant level. All of the other significant cumulative impacts listed above have been identified in this EIR as unavoidable.

16.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines requires that the EIR *"contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."*

During the City's Initial Study process for the proposed McCarthy Ranch Mixed Use Project, it was determined that a number of possible environmental effects of the project, including impacts on mineral resources, population and housing, and recreation, would be insignificant with no need for further environmental assessment in this EIR. These determinations are explained in the Initial Study checklist narrative, which is included in appendix 20.1 of this EIR.

17. ALTERNATIVES TO THE PROPOSED PROJECT

The McCarthy Ranch Mixed Use Project described in chapter 3 (Project Description) has been considered as the principal proposal for development of the three project sites and has been analyzed in detail in this EIR. To provide a basis for further understanding of the environmental effects of the proposed project and possible approaches to reducing its identified significant impacts, section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines requires an EIR to also *"...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."* Section 15126.6(b) of the CEQA Guidelines states that, because the EIR must identify ways to mitigate or avoid significant effects of the proposed project on the environment, *"[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."*

Pursuant to these CEQA sections, this EIR chapter identifies and evaluates six alternatives to the proposed project, five of which would feasibly attain most of the basic project objectives, but would substantially reduce some of the significant adverse environmental effects identified in chapters 4 through 15.

The six alternatives identified for evaluation are listed below. Comparative land use breakdowns are summarized in Table 17.1.

- ***Alternative 1: No Project ("No Build" Scenario).*** As required by the CEQA Guidelines section 15126.6[e][1], this alternative assumes that the project would not occur, i.e., the three project sites would remain in their present condition.

- ***Alternative 2: Buildout Under "MP" and "C2" Zoning (Office Park and Community Shopping Center Uses) as Proposed--But with Reduced Maximum F.A.R.*** This alternative assumes development of the three project sites similar to the proposed project, with office park uses on sites A and B and a community shopping center use on site C, but with a reduced maximum FAR for the office park uses of 0.35 instead of 0.50. The maximum development size under this alternative would total approximately 750,100 square feet of office park floor area (versus 1,071,470 square feet for the proposed project) and 93,580 square feet of community shopping center floor area (the same as the proposed project).

- ***Alternative 3: Buildout Under Current "MP" Zoning--All Research and Development at Maximum Zoning Ordinance Permitted F.A.R. (0.50).*** Consistent with current Milpitas General Plan and zoning designations, this alternative assumes development of all three sites, totaling 58.54 acres, with research and development uses at the Milpitas Zoning

Ordinance[1] permitted maximum F.A.R. of 0.50. The maximum research and development floor area currently permitted on the three sites, assuming a F.A.R. of 0.50, totals approximately 1,274,900 square feet.

- ***Alternative 4: Buildout Under Current "MP" Zoning--All Research and Development at Reduced F.A.R. (0.35).*** The 1997 settlement agreement between the City of Milpitas, City of San Jose, Santa Clara Audubon Society, et al., permits development of the McCarthy Ranch Master Plan Area, including the three project sites, in non-residential use (Industrial Park and Manufacturing) and establishes that the litigants would not object to such development up to a maximum F.A.R. of 0.35. Accordingly, this alternative assumes development of all three sites with research and development uses at a maximum F.A.R. of 0.35. The maximum research and development floor area for the three sites under this limitation totals approximately 843,680 square feet.

- ***Alternative 5: Building Under Current "MP" Zoning--All Corporate Headquarters at Maximum Zoning Ordinance Permitted F.A.R. of 0.50.*** This alternative assumes development of all three sites with corporate headquarters uses at the Milpitas Zoning Ordinance permitted maximum F.A.R. of 0.50, in the event that a response to a potential stronger market for additional corporate office rather than research and development floor space materializes at the project location. Corporate headquarters office space typically generates less daily and peak period vehicular traffic than does research and development floor space.[2] The maximum development size under this alternative would total approximately 1,274,900 square feet of corporate headquarters floor area.

- ***Alternative 6: Buildout with Mixed Use--Corporate Headquarters (0.50 FAR), Office Park (0.50 FAR) and Community Shopping (0.23 FAR).*** This alternative assumes development of the southern half of project site A as corporate headquarters at an F.A.R. of 0.50, the northern half of site A and all of site B as office park at an F.A.R. of 0.50, and all of site C as community shopping center at an F.A.R. of 0.23. These three uses typically generate less daily and peak period vehicular traffic than does research and development floor space. The maximum development size under this alternative would total approximately 481,340 square feet of corporate headquarters floor area, 590,240 square feet of office park floor area, and 93,580 square feet of community shopping center floor area.

CEQA Guidelines section 15126.6(d) indicates that the EIR comparison of the impacts of the identified alternatives is intended to be less detailed than the discussion of the impacts of the proposed project.[3] Following that guideline, the discussions in this chapter of the comparative

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[1]Milpitas Municipal Code Title XI--Zoning, Planning and Annexation, Chapter 10--Zoning, section XI-10-35.05-5.1--"MP" Industrial Park District, Development Standards, Floor Area Ratios.

[2]Daily AM and PM peak hour trip generation rates per square foot of floor area applied by the City of Milpitas for traffic analysis purposes, which are based on rates developed by the San Diego Council of Governments (SANDAG), are less for corporate headquarters space in comparison to research and development space.

[3]CEQA Guidelines section 15126.6(d) states, "If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed."

impacts of the identified alternatives are intentionally less detailed than the discussions in EIR chapters 4 through 14 of the significant effects of the proposed project.

CEQA Guidelines section 15126.6(d) states, "A matrix displaying the major characteristics may be used to summarize the comparison." Accordingly, Table 17.1 herein (Summary Comparison: Project vs. Alternatives); Table 17.2 (Alternatives Comparison: Trip Generation); and Table 17.3 (Alternatives Comparison: Intersection Levels of Service) provide a summary of the various comparative environmental factors for each alternative, leading to selection of the "environmentally superior" alternative, as called for under CEQA Guidelines section 15126.6(e)(2).

The information summarized in these tables has been derived from text sections 17.1 through 17.6 which follow and provide a comparative, narrative description of each of the six alternatives, including the principal characteristics and comparative mitigating and adverse effects of each, followed by section 17.7 which identifies and explains the "environmentally superior" alternative.

Table 17.1
SUMMARY COMPARISON: PROJECT VS. ALTERNATIVES

	Site A	Site B	Site C	Total
Site size (approx.)	44.20 acres	5.00 acres	9.34 acres	58.54 acres
Existing General Plan designation	Industrial Park and Manufacturing	Industrial Park and Manufacturing	Industrial Park and Manufacturing	
Existing zoning	MP (Industrial Park)	MP (Industrial Park)	MP (Industrial Park)	
Maximum F.A.R.	0.50	0.50	0.50	
Proposed Project:				
General Plan designation	No change	No change	General Commercial	
Zoning	No change	No change	C2 (General Commercial)	
Land use	Office park	Office park	Community shopping center	
F.A.R.	0.50	0.5	0.23	
Maximum floor area (approx.)	962,570 sq. ft.	108,900 sq. ft.	93,580 sq. ft.	1,165,050 sq. ft.
Alternative 2:				
General Plan designation	No change	No change	General Commercial	
Zoning	No change	No change	C2 (General Commercial)	
Land use	Office park	Office park	Community shopping center	
F.A.R.	0.35	0.35	0.23	
Maximum floor area (approx.)	673,870 sq. ft.	76,230 sq. ft.	93,580 sq. ft.	843,680 sq. ft.
Alternative 3:				
General Plan designation	No change	No change	No change	
Zoning	No change	No change	No change	
Land use	Research and development	Research and development	Research and development	
F.A.R.	0.50	0.50	0.50	
Maximum floor area (approx.)	962,570 sq. ft.	108,900 sq. ft.	203,430 sq. ft.	1,274,900 sq. ft.

Table 17.1 (continued)
SUMMARY COMPARISON: PROJECT VS. ALTERNATIVES

	Site A	Site B	Site C	Total
Alternative 4:				
General Plan designation	No change	No change	No change	
Zoning	No change	No change	No change	
Land use	Research and development	Research and development	Research and development	
F.A.R.	0.35	0.35	0.35	
Maximum floor area (approx.)	673,870 sq. ft.	76,230 sq. ft.	142,400 sq. ft.	892,500 sq. ft.
Alternative 5:				
General Plan designation	No change	No change	No change	
Zoning	No change	No change	No change	
Land use	Corporate headquarters	Corporate headquarters	Corporate headquarters	
F.A.R.	0.50	0.50	0.50	
Maximum floor area (approx.)	962,570 sq. ft.	108,900 sq. ft.	203,430 sq. ft.	1,274,900 sq. ft.
Alternative 6:				
General Plan designation	No change	No change	General Commercial	
Zoning	No change	No change	C2 (General Commercial)	
Land use	Half of site corporate headquarters; half of site office park	Office park	Community shopping center	
F.A.R.	0.50	0.50	0.23	
Maximum floor area (approx.)	481,340 sq. ft. 481,340 sq. ft.	108,900 sq. ft.	93,580 sq. ft.	1,165,160 sq. ft.

SOURCE: Wagstaff and Associates, December 2008.

Table 17.2
ALTERNATIVE COMPARISON: TRIP GENERATION

Land Use	Size (acres)	FAR	Size x FAR (ksf)	Daily Rate	Daily Trips	AM Peak Hour Peak-Hour Rate	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour Peak-Hour Rate	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Project - Alternative 2													
Research and Development[1]	58.54	0.50	1,275 ksf	8	10,200	0.16	1,469	163	1,632	0.14	143	1,285	1,428
Project - Alternative 3													
Research and Development[1]	58.54	0.35	893 ksf	8	7,140	0.16	1,028	114	1,142	0.14	100	900	1,000
Project - Alternative 4													
Corporate Headquarters[2]	44.20	0.50	963 ksf	7	6,738	0.17	1,031	115	1,145	0.17	115	1,031	1,145
Corporate Headquarters[2]	5.00	0.50	109 ksf	7	762	0.17	117	13	130	0.17	13	117	130
Corporate Headquarters[2]	9.34	0.50	203 ksf	7	1,424	0.17	218	24	242	0.17	24	218	242
Total Net Trips:					*8,924*		*1,365*	*152*	*1,517*		*152*	*1,365*	*1,517*
Project - Alternative 5													
Corporate Headquarters[2]	22.10	0.50	481 ksf	7	3,369	0.17	515	57	573	0.17	57	515	573
Office Park[3]	22.10	0.50	481 ksf	12	5,775	0.13	676	75	751	0.13	150	601	751
Office Park[3]	5.00	0.50	109 ksf	12	1,307	0.13	153	17	170	0.13	34	136	170
Community Shopping Center[4]	9.34	0.23	94 ksf	80	7,486	0.04	180	120	299	0.10	374	374	749
Pass-by Reduction[5]											*-94*	*-94*	*-187*
Total Net Trips:					*17,937*		*1,524*	*269*	*1,793*		*522*	*1,533*	*2,055*

[1] Trip rates (per ksf) based on SANDAG, *Vehicular Traffic Generation Rates*, April 2002. Science Research & Development.
[2] Trip rates (per ksf) based on SANDAG, *Vehicular Traffic Generation Rates*, April 2002. Corporate Headquarters.
[3] Trip rates (per ksf) based on SANDAG, *Vehicular Traffic Generation Rates*, April 2002. Office Park.
[4] Trip rates (per ksf) based on SANDAG, *Vehicular Traffic Generation Rates*, April 2002. Community Shopping Center.
[5] A reduction of 25% was applied to the retail use during the PM peak hour.

SOURCE: Hexagon Transportation Consultants, Inc., December 2008.

Table 17.3
ALTERNATIVES COMPARISON: INTERSECTION LEVELS OF SERVICE

		Approved		Project Conditions				Alternative 2 Project Conditions				Alternative 3 Project Conditions				Alternative 4 Project Conditions				Alternative 5 Project Conditions			
	Peak Hour	Avg. Delay	LOS	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
Milmont Drive & Dixon Landing Rd	AM	45.0	D	56.0	E	14.6	0.09	54.1	D	11.9	0.07	50.7	D	7.6	0.05	53.3	D	10.9	0.07	54.7	D	12.8	0.08
	PM	26.8	C	28.2	C	2.2	0.08	27.6	C	1.5	0.06	27.3	C	0.9	0.04	27.7	C	1.6	0.06	28.1	C	2.1	0.08
Milpitas Blvd & Calaveras Blvd*	AM	81.9	F	86.2	F	7.1	0.02	85.2	F	5.3	0.01	84.1	F	3.6	0.01	84.9	F	4.9	0.01	85.8	F	6.4	0.02
	PM	57.1	E	59.9	E	5.4	0.02	58.1	E	1.9	0.01	57.9	E	1.4	0.01	58.2	E	2.0	0.01	59.7	E	5.1	0.02
McCarthy Blvd & Alder Dr	AM	31.4	C	35.2	D	4.3	0.04	35.0	C	4.5	0.04	33.7	C	2.9	0.03	34.6	C	4.0	0.03	34.8	C	3.8	0.03
	PM	57.2	E	85.0	F	44.0	0.15	74.9	E	27.8	0.10	68.6	E	17.9	0.07	76.4	E	30.1	0.11	83.2	F	41.1	0.14
McCarthy Blvd & Tasman Dr	AM	79.2	E	82.1	F	4.9	0.01	81.2	F	3.4	0.01	80.6	F	2.3	0.01	81.1	F	3.2	0.01	82.0	F	4.6	0.01
	PM	43.9	D	44.7	D	0.9	0.03	44.3	D	0.5	0.02	44.2	D	0.4	0.01	44.3	D	0.5	0.02	44.6	D	0.8	0.03
Alder Dr & Tasman Dr	AM	17.2	B	18.3	B	4.2	0.05	17.8	B	1.5	0.04	17.6	B	1.0	0.03	17.8	B	1.4	0.04	18.2	B	3.8	0.05
	PM	87.3	F	113.8	F	34.0	0.08	106.5	F	24.0	0.06	100.6	F	16.6	0.04	107.7	F	25.6	0.06	112.4	F	32.2	0.08

* Denotes CMP intersection
[ ] - Denotes project impact.

SOURCE: Hexagon Transportation Consultants, Inc., December 2008.

17.1 ALTERNATIVE 1: NO PROJECT ("NO BUILD" SCENARIO)

17.1.1 Principal Characteristics

As required by the CEQA Guidelines section 15126.6[e][1], this alternative assumes that the project would not occur, i.e., the three project sites would remain in their present condition. The existing cultivated fields (row crops) on sites A, B, and C and approximately 12 single-story agricultural buildings of various types and sizes on site A (i.e., barns, produce storage and packing sheds, warehousing, seasonal worker housing, accessory storage tanks, equipment storage yards and parking area) would remain. All existing interim agricultural activities on the three sites would continue.

The land use characteristics of this "no build" alternative in comparison to the proposed project and other identified alternatives to the proposed project are summarized in Table 17.1.

17.1.2 Alternative 1 Evaluation: Comparative Adverse and Mitigating Effects

(a) Aesthetics. Chapter 4 of this EIR indicates that no significant adverse project impacts on the local visual setting would occur as a result of future development of the site as currently proposed (i.e., the proposed project), although the project would change the visual character of the three remaining undeveloped project sites from agricultural (row crops and associated agricultural buildings) to the highly-developed, generally uniform urban landscape of the surrounding McCarthy Ranch Master Plan area along McCarthy Boulevard between SR 237 and Dixon Landing Road. Approximately 60 percent of the Master Plan area along McCarthy Boulevard has been built out with a generally uniform pattern of building heights and masses typical of contemporary light industrial, R&D, office park, and region-serving shopping developments in the south Bay Area. Under this "No Build" Alternative 1, the three project sites would remain as three of five remaining undeveloped properties within this developing landscape. No substantive visual changes would occur.

(b) Air Quality and Climate Change. Under the proposed project, a number of significant adverse air quality and climate change impacts would occur, including Impact 5-1: Project Demolition and Construction Period Emissions, Impact 5-2: Project and Cumulative Long-Term Regional Air Emissions (significant and unavoidable), and Impact 5-3: Project and Cumulative Climate Change (significant and unavoidable). None of these impacts would occur under the Alternative 1: No Build scenario.

(c) Biological Resources. The proposed project would result in a less-than-significant impact on special-status plants, species, but could result in a potentially significant impact on special-status wildlife species (Impact 6-1: Potential Project Impacts on Burrowing Owl and Impact 6-2: Potential Impacts on Nesting Raptors). In addition, the development of project site A could result in the loss of one or more ordinance-sized trees (Impact 6-3: Loss of Ordinance-Sized Trees). No significant adverse impacts on these two or any other identified special status species or loss of ordinance-sized trees would occur under the Alternative 1: No Build scenario.

(d) Cultural and Historical Resources. Implementation of the proposed project, including associated grading/excavation activities, could disturb an as yet unidentified subsurface archaeological resource (Impact 7-1: Project-Related Potential for Disturbance of Archaeological Resources). Under Alternative 1, the "No Build" scenario, no significant impacts on archaeological or historic resources would occur.

(e) Geology and Soils. Under the proposed project scenario, seismic ground-shaking and ground-stability impact concerns related to the location of the three project sites in a highly earthquake-prone region atop alluvial soils which are considered to be highly expansive (shrink-swell-prone) with moderately high potential for earthquake-induced liquefaction, would be minimized (reduced to acceptable, less-than-significant levels) by existing, routine City geotechnical investigation requirements and building code enforcement. Under Alternative 1, the "No Build" scenario, these soil and geotechnical impact factors would not be of concern.

(f) Hazards and Hazardous Materials. Under the proposed project scenario, site development activities would result in exposure of construction workers and the public to potential project-related onsite hazardous soils or groundwater contamination (Impact 5-1). Such impacts could also occur under Alternative 1, No Build, due to ongoing cultivation activities, but the potential for a significant impact would be substantially less (substantially less excavation activity, fewer workers, etc.).

(h) Land Use and Agriculture. Under the proposed project, although the proposed land uses and FARs would be generally consistent with current Milpitas General Plan policies and zoning regulations, the proposed office and community shopping activities would displace existing interim agricultural activities, including existing cultivated row crops on all three sites and the existing produce storage and packing facility and associated worker housing on site A. These losses of interim agricultural use would not occur under Alternative 1, the "No Build" scenario.

(i) Noise. Under the proposed project, the associated future office park and community shopping uses and occupants on sites C and D would be exposed to existing and future I-880 traffic noise intrusion levels that would require detailed noise analysis and project noise reduction specifications to ensure against a significant land use/noise compatibility impact (Impact 12-1: Project Compatibility with Existing and Projected Noise Environment). Under Alternative 1, the "No Build" scenario, this impact would not occur.

(j) Public Services, Utilities and Service Systems. Under the proposed project scenario, buildout of the three project sites with the proposed office park and community shopping uses would result in less-than-significant project-related and cumulative increases in water demand, potentially significant project-related and cumulative impacts on sewage treatment and transmission capacity (Impact 13-1), a less-than-significant project-related increase in police service demands, a less-than-significant project-related increase in fire protection and emergency medical service demands, and a less-than-significant project impact on solid waste collection and disposal services. Under Alternative 1, the "No Build" scenario, none of these service demand increases would occur.

(k) Transportation and Circulation Impacts. Table 17.2 summarizes the comparative vehicular trip generation characteristics of the proposed project versus the five identified alternatives to the proposed project. Table 17.3 shows the comparative intersection impacts of the proposed project versus the five project alternatives. The proposed project scenario would result in adverse peak traffic period operational impacts on four intersections (Impacts 14-1 through 14-5), as indicated in Table 17.3 herein, as well as significant increases in peak period traffic volumes on three directional freeway segments of I-880 and one directional freeway segment of SR 237 (Impact 14-6). Project plus background and interim cumulative conditions would result in peak traffic period operational impacts on eight additional intersections (Impact 14-7 through 14-18), and Project plus Long-Term (2030) Cumulative Conditions would result in significant

additional operational impacts along several segments of McCarthy Boulevard between Bellew Drive and Dixon Landing Road (Impact 14-19). Under Alternative 1, the "No Build" scenario, none of these traffic impacts would occur.

(l) Project Consistency with Local and Regional Plans. The proposed project would require City approval of a General Plan amendment to change the General Plan Land Use Map designation of site C from *Industrial Park and Manufacturing* to *General Commercial* and a rezoning to change the Zoning Ordinance designation of site C from *Industrial Park* (MP) to *General Commercial*. Alternative 1, the "No Build" scenario, would require no General Plan amendment or rezoning.

17.2 ALTERNATIVE 2: BUILDOUT UNDER "MP" AND "C2" ZONING (OFFICE PARK AND COMMUNITY SHOPPING CENTER) USES AS PROPOSED, BUT WITH REDUCED MAXIMUM F.A.R.

17.2.1 Principal Characteristics

This alternative assumes development of the three project sites similar to the proposed project, with office park uses on sites A and B and a community shopping center use on site C, but with a reduced maximum FAR for the office park uses of 0.35 instead of 0.50. The maximum development size under this alternative would total approximately 750,100 square feet of office park floor area (versus 1,071,470 square feet for the proposed project) and 93,580 square feet of community shopping center floor area (the same as the proposed project).

17.2.2 Alternative 2 Evaluation: Comparative Adverse and Mitigating Effects

(a) Aesthetics. The aesthetic effects of Alternative 2 would be similar, but slightly less intensive, than those of the proposed project. No significant reduction or increase in aesthetic impacts, compared to those of the proposed project, would occur.

(b) Air Quality and Climate Change. Similarly, the air quality and climate change effects of Alternative 2 would be roughly 30 to 40 percent less than those of the proposed project due to the trip generation reductions indicated in Table 17.2. Impacts 5-1: Project Demolition and Construction Period Emissions (significant), 5-2: Project and Cumulative Long-Term Regional Air Emissions (significant and unavoidable), and 5-3: Project and Cumulative Climate Change (significant and unavoidable), although substantially reduced, would still occur.

(c) Biological Resources. The biological resources impacts of Alternative 2 would also be similar to those of the proposed project. Although the maximum F.A.R. of the development would be reduced, the same or a similar degree of site surface disturbance would occur, with the same biological resource impacts and mitigation needs described in chapter 6 of the proposed project.

(d) Cultural and Historical Resources. Similarly, the cultural and historical resources impacts of Alternative 2 would be very similar to those of the proposed project. The same or a similar degree of site surface disturbance would occur, with the same potential archaeological resource disturbance impact and mitigation needs as the proposed project.

(e) Geology and Soils. Again, the impacts of Alternative 2 would be very similar to those of the proposed project. The same or similar ground-shaking and ground stability impact concerns identified in chapter 8 for the proposed project would apply to Alternative 2, although the level of occupancy (total floor area) exposed to these risks would be reduced by approximately 28 percent.

(f) Hazards and Hazardous Materials. Similarly, the impacts of Alternative 2 would be very similar to those of the proposed project, although the level of occupancy (total floor area) and associated occupant exposure to identified health risks would be reduced by approximately 28 percent.

(h) Land Use and Agriculture. The reduced F.A.R. office park and shopping center land uses under Alternative 2 would have the same or similar level of surface land area disturbance and thus the same interim agricultural land loss effect as the proposed project. The same General Plan amendment and rezoning for site C would be necessary to permit the proposed community shopping center use of that property.

(i) Noise. Under Alternative 2, the associated future office park and community shopping uses on sites C and D would be exposed to the same existing and future I-880 traffic noise intrusion levels and impact as the proposed project, although the level of occupancy exposed to this impact would be reduced. Construction period noise and vibration and mitigation needs would be essentially the same as for the proposed project.

(j) Public Services, Utilities and Service Systems. Under Alternative 2, buildout of the three project sites with the same but slightly less intensive office park and community shopping uses would result in similar, but slightly reduced, project-related and cumulative increases in water demand (therefore, still less than significant), wastewater treatment and transmission capacity impacts (still significant), police service demands (still less than significant), fire protection and emergency medical service demands (still less than significant) and solid waste collection and disposal service demands (still less than significant).

(k) Transportation and Circulation Impacts. As shown by Table 17.2 (in comparison to Table 14.8, Project Trip Generation, in chapter 14 herein), the daily period trip generation characteristics of Alternative 2 would be approximately 50 percent less, AM peak hour trip generation would be approximately 17 percent less, and PM peak hour trip generation would be approximately 36 percent less than the proposed project. These trip generation trip reductions would have corresponding substantial effects in reducing project contributions to peak period operational impacts on study area intersections, arterial roadway links, and freeway segments. In particular, as shown in Table 17.3, these trip generation reductions would result in elimination of significant project condition AM and PM peak hour impacts on the Milmont Drive/Dixon Landing Road intersection (Impact 14-1), and AM peak hour impacts on the McCarthy Boulevard/Tassman Drive intersection (Impact 14-4).

17.3 ALTERNATIVE 3: BUILDOUT UNDER "MP" ZONING--ALL R&D AT MAXIMUM ZONING ORDINANCE PERMITTED F.A.R. (0.50)

17.3.1 Principal Characteristics

Consistent with current Milpitas General Plan and zoning designations, this alternative assumes development of all three sites, totaling 58.54 acres, with research and development uses at the Milpitas Zoning Ordinance[1] permitted maximum F.A.R. of 0.50. The maximum research and development floor area currently permitted on the three sites, assuming a F.A.R. of 0.50, totals approximately 1,274,900 square feet.

17.3.2 Alternative 3 Evaluation: Comparative Adverse and Mitigating Effects

(a) Aesthetics. The aesthetic effects of Alternative 3 would be similar, but slightly more intensive, than those of the proposed project. No significant reduction or increase in aesthetic impacts, compared to those of the proposed project, would occur.

(b) Air Quality and Climate Change. Similarly, the air quality and climate change effects of Alternative 3 would be approximately 50 percent less than those of the proposed project due to an approximately 65 percent decrease in daily trip generation, an approximately 42 to 52 percent decrease in peak hour trip generation, and an approximately 9 percent increase in floor area to air condition. Impacts 5-1: Project Demolition and Construction Period Emissions (significant), 5-2: Project and Cumulative Long-Term Regional Air Emissions (significant and unavoidable), and 5-3: Project and Cumulative Climate Change (significant and unavoidable), although increased, would remain.

(c) Biological Resources. The biological resources impacts of Alternative 3 would also be similar to those of the proposed project. Although the maximum overall F.A.R. of the development would be increased, the same or a similar degree of site surface disturbance would occur, with the same biological resource impacts and mitigation needs described in chapter 6 of the proposed project.

(d) Cultural and Historical Resources. Similarly, the cultural and historical resources impacts of Alternative 3 would be very similar to those of the proposed project. The same or a similar degree of site surface disturbance would occur, with the same potential archaeological resource disturbance impact and mitigation needs as the proposed project.

(e) Geology and Soils. Again, the impacts of Alternative 3 would be very similar to those of the proposed project. The same or similar ground-shaking and ground stability impact concerns identified in chapter 8 for the proposed project would apply to Alternative 3, although the level of occupancy (total floor area) exposed to these risks would be increased by approximately 9 percent.

(f) Hazards and Hazardous Materials. Similarly, the impacts of Alternative 3 would be very similar to those of the proposed project, although the level of occupancy (total floor area) and

[1]Milpitas Municipal Code Title XI--Zoning, Planning and Annexation, Chapter 10--Zoning, section XI-10-35.05-5.1--"MP" Industrial Park District, Development Standards, Floor Area Ratios.

associated occupant exposure to identified health risks would be increased by approximately 9 percent.

(h) Land Use and Agriculture. The R&D land uses at a maximum F.A.R. of 0.50 under Alternative 3 would have the same or slightly increased level of surface land area disturbance and thus the same interim agricultural land loss effect as the proposed project. No General Plan amendment and rezoning for site C or for the other two sites (A and B) would be necessary to permit the proposed R&D use of these properties.

(i) Noise. Under Alternative 3, the associated future R&D uses on sites C and D would be exposed to the same existing and future I-880 traffic noise intrusion levels and impact as the proposed project, although the level of occupancy exposed to this impact would be increased on site C. Construction period noise and vibration and mitigation needs would be essentially the same as for the proposed project.

(j) Public Services, Utilities and Service Systems. Under Alternative 3, buildout of the three project sites with R&D rather than office park and community shopping uses would result in similar, but slightly increased project-related and cumulative increases in water demand (still less than significant), wastewater treatment and transmission capacity impacts (still significant), police service demands (still less than significant), fire protection and emergency medical service demands (still less than significant) and solid waste collection and disposal service demands (still less than significant).

(k) Transportation and Circulation Impacts. As shown by Table 17.2, the daily period trip generation characteristics of Alternative 3 in comparison to Table 14.8 (Project Trip Generation) in chapter 14, would be approximately 65 percent less, AM peak hour trip generation would be approximately 42 percent less, and PM peak hour trip generation would be approximately 55 percent less than the proposed project. These trip generation trip reductions would have corresponding effects in substantially reducing project contributions to peak period operational impacts on study area intersections, arterial roadway links, and freeway segments. In particular, as shown in Table 17.2, this trip generation reduction would result in elimination of significant project condition AM peak hour impacts on the Milmont Drive/Dixon Landing Road intersection (Impact 14-1), and Milpitas Boulevard/Calaveras Boulevard intersection (Impact 14-2), and PM peak hour impacts on the McCarthy Boulevard/Tassman Drive intersection (Impact 14-4).

17.4 ALTERNATIVE 4: BUILDOUT UNDER CURRENT "MP" ZONING--ALL R&D AT REDUCED F.A.R. (0.35)

17.4.1 Principal Characteristics

The 1997 settlement agreement between the City of Milpitas, City of San Jose, Santa Clara Audubon Society, et al., permits development of the McCarthy Ranch Master Plan Area, including the three project sites, in non-residential use (Industrial Park and Manufacturing) and establishes that the litigants would not object to such development up to a maximum F.A.R. of 0.35. Accordingly, this alternative assumes development of all three sites with research and development uses at a maximum F.A.R. of 0.35. The maximum research and development floor area for the three sites under this limitation totals approximately 843,680 square feet.

17.4.2 Alternative 4 Evaluation: Comparative Adverse and Mitigating Effects

(a) Aesthetics. The aesthetic effects of Alternative 4 would be similar, but less intensive, than those of the proposed project (due to the approximately 23 percent reduction in total floor area). However, no significant reduction or increase in aesthetic impacts, compared to those of the proposed project, would occur.

(b) Air Quality and Climate Change. Similarly, the air quality and climate change effects of Alternative 4 would be roughly 60 percent less than those of the proposed project due to an approximately 56 percent decrease in daily trip generation, approximately 23 percent reduction in AM peak hour trip generation, approximately 68 percent reduction in PM peak hour trip generation, and approximately 23 percent reduction in floor area to air condition. Impacts 5-1: Project Demolition and Construction Period Emissions (significant), 5-2: Project and Cumulative Long-Term Regional Air Emissions (significant and unavoidable), and 5-3: Project and Cumulative Climate Change (significant and unavoidable), although substantially reduced, would still occur.

(c) Biological Resources. The biological resources impacts of Alternative 4 would also be similar to those of the proposed project. Although the maximum F.A.R. of the development would be reduced, the same or a similar degree of site surface disturbance would occur, with the same biological resource impacts and mitigation needs described in chapter 6 of the proposed project.

(d) Cultural and Historical Resources. Similarly, the cultural and historical resources impacts of Alternative 4 would be very similar to those of the proposed project. The same or a similar degree of site surface disturbance would occur, with the same potential archaeological resource disturbance impact and mitigation needs as the proposed project.

(e) Geology and Soils. Again, the impacts of Alternative 4 would be very similar to those of the proposed project. The same or similar ground-shaking and ground stability impact concerns identified in chapter 8 for the proposed project would apply to Alternative 4, although the level of occupancy (total floor area) exposed to these risks would be reduced by approximately 23 percent.

(f) Hazards and Hazardous Materials. Similarly, the impacts of Alternative 4 would be very similar to those of the proposed project, although the level of occupancy (total floor area) and associated occupant exposure to identified health risks would be reduced by approximately 23 percent.

(h) Land Use and Agriculture. The reduced F.A.R. R&D land uses under Alternative 4 would have a similar level of surface land area disturbance and thus a similar interim agricultural land loss effect as the proposed project. No General Plan amendment or rezoning for site C or sites A and B would be necessary to permit the proposed R&D use of the three properties.

(i) Noise. Under Alternative 4, the associated R&D uses on sites C and D would be exposed to the same existing and future I-880 traffic noise intrusion levels and impact as the proposed project, although the total floor area on sites C and D and associated level of occupancy exposed to this impact would be increased by approximately 7 percent. Construction period noise and vibration and mitigation needs would be essentially the same as for the proposed project.

(j) Public Services, Utilities and Service Systems. Under Alternative 4, buildout of the three project sites at a less intensive level with R&D rather than office park and community shopping uses would result in similar, but somewhat reduced, project-related and cumulative increases in water demand (therefore, still less than significant), wastewater treatment and transmission capacity impacts (still significant), police service demands (still less than significant), fire protection and emergency medical service demands (still less than significant) and solid waste collection and disposal service demands (still less than significant).

(k) Transportation and Circulation Impacts. As shown by Table 17.2, the daily trip generation characteristics of Alternative 4 would be approximately 56 percent less, AM peak hour trip generation would be approximately 23 percent less, and PM peak hour trip generation would be approximately 68 percent less than the proposed project. These trip generation reductions would have corresponding effects in reducing project contributions to peak period operational impacts on study area intersections, arterial roadway links, and freeway segments. In particular, as shown in Table 17.3, these trip generation reductions would result in elimination of significant project condition AM and PM peak hour impacts on the Milmont Drive/Dixon Landing Road intersection (Impact 14-1), and AM peak hour impacts on the McCarthy Boulevard/Tassman Drive intersection (Impact 14-4).

17.5 ALTERNATIVE 5: BUILDOUT UNDER CURRENT "MP" ZONING--ALL CORPORATE HEADQUARTERS AT MAXIMUM ZONING PERMITTED F.A.R. (0.50)

17.5.1 Principal Characteristics

This alternative assumes development of all three sites with corporate headquarters uses at the Milpitas Zoning Ordinance permitted maximum F.A.R. of 0.50, in the event that a response to a potential stronger market for additional corporate office rather than research and development floor space materializes at the project location. Corporate headquarters office space typically generates less daily and peak period vehicular traffic than does research and development floor space.[1] The maximum development size under this alternative would total approximately 1,274,900 square feet of corporate headquarters floor area.

17.5.2 Alternative 5 Evaluation: Comparative Adverse and Mitigating Effects

(a) Aesthetics. The aesthetic effects of Alternative 5 would be similar to those of the proposed project (similar floor area total). No significant reduction or increase in aesthetic impacts, compared to those of the proposed project, would occur.

(b) Air Quality and Climate Change. Similarly, the air quality and climate change effects of Alternative 5 would be similar, but approximately 9 to 10 percent less, than those of the proposed project. Impacts 5-1: Project Demolition and Construction Period Emissions (significant), 5-2: Project and Cumulative Long-Term Regional Air Emissions (significant and

[1]Daily AM and PM peak hour trip generation rates per square foot of floor area applied by the City of Milpitas for traffic analysis purposes, which are based on rates developed by the San Diego Council of Governments (SANDAG), are less for corporate headquarters space in comparison to research and development space.

unavoidable), and 5-3: Project and Cumulative Climate Change (significant and unavoidable), although substantially reduced, would still occur.

(c) Biological Resources. The biological resources impacts of Alternative 5 would also be similar to those of the proposed project. Although the maximum F.A.R. of the development would be slightly increased, the same or a similar degree of site surface disturbance would occur, with the same biological resource impacts and mitigation needs described in chapter 6 of the proposed project.

(d) Cultural and Historical Resources. Similarly, the cultural and historical resources impacts of Alternative 5 would be very similar to those of the proposed project. The same or a similar degree of site surface disturbance would occur, with the same potential archaeological resource disturbance impact and mitigation needs as the proposed project.

(e) Geology and Soils. Again, the impacts of Alternative 5 would be very similar to those of the proposed project. The same or similar ground-shaking and ground stability impact concerns identified in chapter 8 for the proposed project would apply to Alternative 5, although the level of occupancy (total floor area) exposed to these risks would be slightly increased (by roughly 9 percent).

(f) Hazards and Hazardous Materials. Similarly, the impacts of Alternative 5 would be very similar to those of the proposed project, although the level of occupancy (total floor area) and associated occupant exposure to identified health risks would be slightly increased (by roughly 9 percent).

(h) Land Use and Agriculture. The slightly increased overall F.A.R. of the corporate headquarters land uses under Alternative 5 would have the same or similar level of surface land area disturbance and thus the same interim agricultural land loss effect as the proposed project. No General Plan amendment or rezoning for site C or sites A and B would be necessary to permit the proposed corporate headquarters use of the three properties.

(i) Noise. Under Alternative 5, the associated corporate headquarters uses on sites C and D would be exposed to the same existing and future I-880 traffic noise intrusion levels and impact as the proposed project, although the level of occupancy exposed to this impact would be reduced. Construction period noise and vibration and mitigation needs would be essentially the same as for the proposed project.

(j) Public Services, Utilities and Service Systems. Under Alternative 5, buildout of the three project sites with a slightly more intensive F.A.R. would result in similar, but slightly increased, project-related and cumulative increases in water demand (therefore, still less than significant), wastewater treatment and transmission capacity impacts (still significant), police service demands (still less than significant), fire protection and emergency medical service demands (still less than significant) and solid waste collection and disposal service demands (still less than significant).

(k) Transportation and Circulation Impacts. As shown by Table 17.2, the daily trip generation characteristics of Alternative 5 would be approximately 12 percent less, AM peak hour trip generation would be approximately 9 percent less, and PM peak hour trip generation would be approximately 8 percent less than the proposed project. These trip generation trip reductions would have corresponding effects in reducing project contributions to peak period operational

impacts on study area intersections, arterial roadway links, and freeway segments. In particular, as shown in Table 17.2, these trip generation reductions would result in elimination of significant project condition AM peak hour impacts on the Milmont Drive/Dixon Landing Road intersection (Impact 14-1).

17.6 ALTERNATIVE 6: BUILDOUT WITH MIXED USE--CORPORATE HEADQUARTERS (0.50 F.A.R.), OFFICE PARK (0.50 F.A.R.) AND COMMUNITY SHOPPING (0.23 F.A.R.)

17.6.1 Principal Characteristics

This alternative assumes development of the southern half of project site A as corporate headquarters at an F.A.R. of 0.50, the northern half of site A and all of site B as office park at an F.A.R. of 0.50, and all of site C as community shopping center at an F.A.R. of 0.23. These three uses typically generate less daily and peak period vehicular traffic than does research and development floor space. The maximum development size under this alternative would total approximately 481,340 square feet of corporate headquarters floor area, 590,240 square feet of office park floor area, and 93,580 square feet of community shopping center floor area.

17.6.2 Alternative 6 Evaluation: Comparative Adverse and Mitigating Effects

(a) Aesthetics. The aesthetic effects of Alternative 6 would be similar to those of the proposed project. No significant reduction or increase in aesthetic impacts, compared to those of the proposed project, would occur.

(b) Air Quality and Climate Change. Similarly, the air quality and climate change effects of Alternative 6 would be similar to the proposed project. Impacts 5-1: Project Demolition and Construction Period Emissions (significant), 5-2: Project and Cumulative Long-Term Regional Air Emissions (significant and unavoidable), and 5-3: Project and Cumulative Climate Change (significant and unavoidable), would still occur.

(c) Biological Resources. The biological resources impacts of Alternative 6 would also be similar to those of the proposed project. The same or a similar degree of site surface disturbance would occur, with the same biological resource impacts and mitigation needs described in chapter 6 of the proposed project.

(d) Cultural and Historical Resources. Similarly, the cultural and historical resources impacts of Alternative 6 would be very similar to those of the proposed project. The same or a similar degree of site surface disturbance would occur, with the same potential archaeological resource disturbance impact and mitigation needs as the proposed project.

(e) Geology and Soils. Again, the impacts of Alternative 6 would be very similar to those of the proposed project. The same or similar ground-shaking and ground stability impact concerns identified in chapter 8 for the proposed project would apply to Alternative 6,.

(f) Hazards and Hazardous Materials. Similarly, the impacts of Alternative 6 would be very similar to those of the proposed project.

(h) Land Use and Agriculture. The similar F.A.R. corporate headquarters, office park and shopping center land uses under Alternative 6 would have the same or similar level of surface

land area disturbance and thus the same interim agricultural land loss effect as the proposed project. The same General Plan amendment and rezoning for site C would be necessary to permit the proposed community shopping center use of that property.

(i) Noise. Under Alternative 6, the associated future office park and community shopping uses on sites C and D would be exposed to the same existing and future I-880 traffic noise intrusion levels and impact as the proposed project. Construction period noise and vibration and mitigation needs would be essentially the same as for the proposed project.

(j) Public Services, Utilities and Service Systems. Under Alternative 6, buildout of the three project sites with corporate headquarters, office park and community shopping uses at the same F.A.R.s as the proposed project would result in similar project-related and cumulative increases in water demand (therefore, still less than significant), wastewater treatment and transmission capacity impacts (still significant), police service demands (still less than significant), fire protection and emergency medical service demands (still less than significant) and solid waste collection and disposal service demands (still less than significant).

(k) Transportation and Circulation Impacts. The daily and peak period trip generation characteristics of Alternative 6 would be approximately the same as the proposed project. These similar trip generation trip characteristics would have the same corresponding peak period operational impacts on study area intersections, arterial roadway links, and freeway segments.

17.7 CONCLUSIONS: ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines (section 15126[e][2]) stipulate, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." The summary comparisons in sections 17.1 through 17.6 herein 5 indicate that, of the various alternatives evaluated in this EIR other than Alternative 1, the "no project" alternative, ***Alternative 4: Buildout Under "MP" Zoning--All R&D at Reduced F.A.R. (0.35)***, would result in the least adverse combination of net additional environmental impacts (in comparison to the proposed project), and therefore would be the "environmentally superior" alternative. Alternative 4 would nevertheless result in its own significant adverse air quality, climate change, biological resources, cultural resources, hazards and hazardous materials, noise, and transportation and circulation impacts.

18. MITIGATION MONITORING

This EIR chapter describes a recommended monitoring program for implementation of the mitigation measures identified in this EIR, and describes relationships between various anticipated monitoring needs and responsible monitoring agencies.

18.1 MONITORING REQUIREMENTS

CEQA section 21081.6 of the Public Resources Code requires all public agencies to adopt reporting or monitoring programs when they approve projects subject to environmental impact reports or mitigated negative declarations.

A mitigation monitoring program would be required for implementation subsequent to certification of the McCarthy Ranch Mixed Use Project EIR. Most of the environmental mitigation measures that have been recommended in this EIR would be subject to effective monitoring through normal Milpitas General Plan, zoning, subdivision, Planned Development Permit, grading, site and architectural design review, and building permit approval procedures, as well as during associated plan check and field inspection procedures. However, to satisfy CEQA section 21081.6, a documented record of implementation will be necessary.

18.2 MONITORING CHECKLIST FORMAT

While actual formulation of a specific mitigation monitoring program should not be completed unless and until this EIR is certified, the framework to be followed in finalizing the monitoring program subsequent to project approval can be determined on a preliminary basis at this EIR stage.

The attached checklist (Table 18.1) includes spaces for identifying: (1) each mitigation measure included in the EIR; (2) the party responsible for implementing that mitigation measure and any related requirements with respect to the timing of implementation; and (3) the party responsible for performing mitigation monitoring plus information on the type and required timing implications of the monitoring procedures. These checklist categories are discussed in more detail below.

18.1.1 Identified Impact

This column would include each identified significant adverse impact as it is described in the EIR summary table (Table 2.1 in EIR chapter 2).

18.1.2 Mitigation Measure (Performance Criteria)

This column would include each mitigation measure as it is described in the EIR summary table (Table 2.1 in EIR section 2). The description could be supplemented by any applicable

performance criteria (i.e., the measure by which the success of the mitigation can be gauged) associated with each measure.

18.1.3 Monitoring

This column would describe (1) the "implementation entity" responsible for carrying out each mitigation measure (e.g., a City department, another public agency); (2) the "type of monitoring action" required (e.g., condition of project approval, condition f specific required subsequent approval action, established plan check and/or inspection procedures or, if these are not sufficient, specialized monitoring procedures); (3) specific implementation timing requirements (e.g., at the completion of a particular development review or construction phase, prior to occupancy, or when some specific threshold is reached); and (4) the "monitoring and verification entity" responsible for performing the monitoring of each mitigation (e.g., a City department, another public agency, or some other entity).

18.1.4 Verification

The verification column would provide a space for the signature and date of the "monitoring and verification" entity when a monitoring milestone is reached.

Table 18.1

MITIGATION MONITORING CHECKLIST--McCARTHY RANCH MIXED USE PROJECT

The environmental mitigation measures listed in column two below have been incorporated into the conditions of approval for the McCarthy Ranch Mixed Use Project in order to mitigate identified environmental impacts. A completed and signed chart will indicate that each mitigation requirement has been complied with, and that City and state monitoring requirements have been fulfilled with respect to Public Resources Code section 21081.6.

		MONITORING				VERIFICATION	
IDENTIFIED IMPACT	**RELATED MITIGATION MEASURE (CONDITION OF APPROVAL)**	**Impl. Entity**	**Type of Monitoring Action**	**Timing Requirements**	**Monitoring and Verification Entity**	**Signature**	**Date**
AESTHETICS							
Impact 4-1.							
Impact 4-2.							
Impact 4-3.							
AIR QUALITY							
Impact 5-1.							
Impact 5-2.							
Impact 5-3.							
BIOLOGICAL RESOURCES							
Impact 6-1.							
Impact 6-2.							
Impact 6-3.							

19. ORGANIZATIONS AND PERSONS CONTACTED

19.1 CITY OF MILPITAS

James Lindsay, Planning & Neighborhood Services Director
Sheldon Ah Sing, Senior Planner
Joseph Oliva, Senior Transportation Planning, Transportation Division

19.2 APPLICANT

Joe McCarthy, The McCarthy Ranch
Joey McCarthy, The McCarthy Ranch
Jim Foley, The McCarthy Ranch

20. APPENDICES

20.1 Notice of Preparation and Initial Study; September 16, 2008
20.2 Supplemental Traffic Information: Milpitas Interim Conditions
20.3 Water Supply Assessment for the Proposed McCarthy Ranch Mixed Use Project
20.4 CEQA Standards for EIR Adequacy
20.5 CEQA Definition of "Mitigation"
20.6 EIR Preparers

APPENDIX 20.1

NOTICE OF PREPARATION AND INITIAL STUDY SEPTEMBER 16, 2008

NOTICE OF PREPARATION

To:	Responsible Agencies, Trustee Agencies, and Other Interested Parties
From:	City of Milpitas
Street Address:	455 East Calaveras Boulevard
City/State/Zip:	Milpitas, California 95035
Subject:	**Notice of Preparation of an Environmental Impact Report for the McCarthy Ranch Mixed Use Project**[1]

The City of Milpitas will be the Lead Agency and will prepare an environmental impact report (EIR) for the proposed McCarthy Ranch Mixed Use Project (see project description below). The City is interested in the views of your agency as to the scope and content of the EIR's environmental information pertaining to your agency's statutory responsibilities in connection with the proposed project.

The proposed project, its location, and its potential environmental effects are described in more detail in the attached Initial Study and Environmental Checklist.

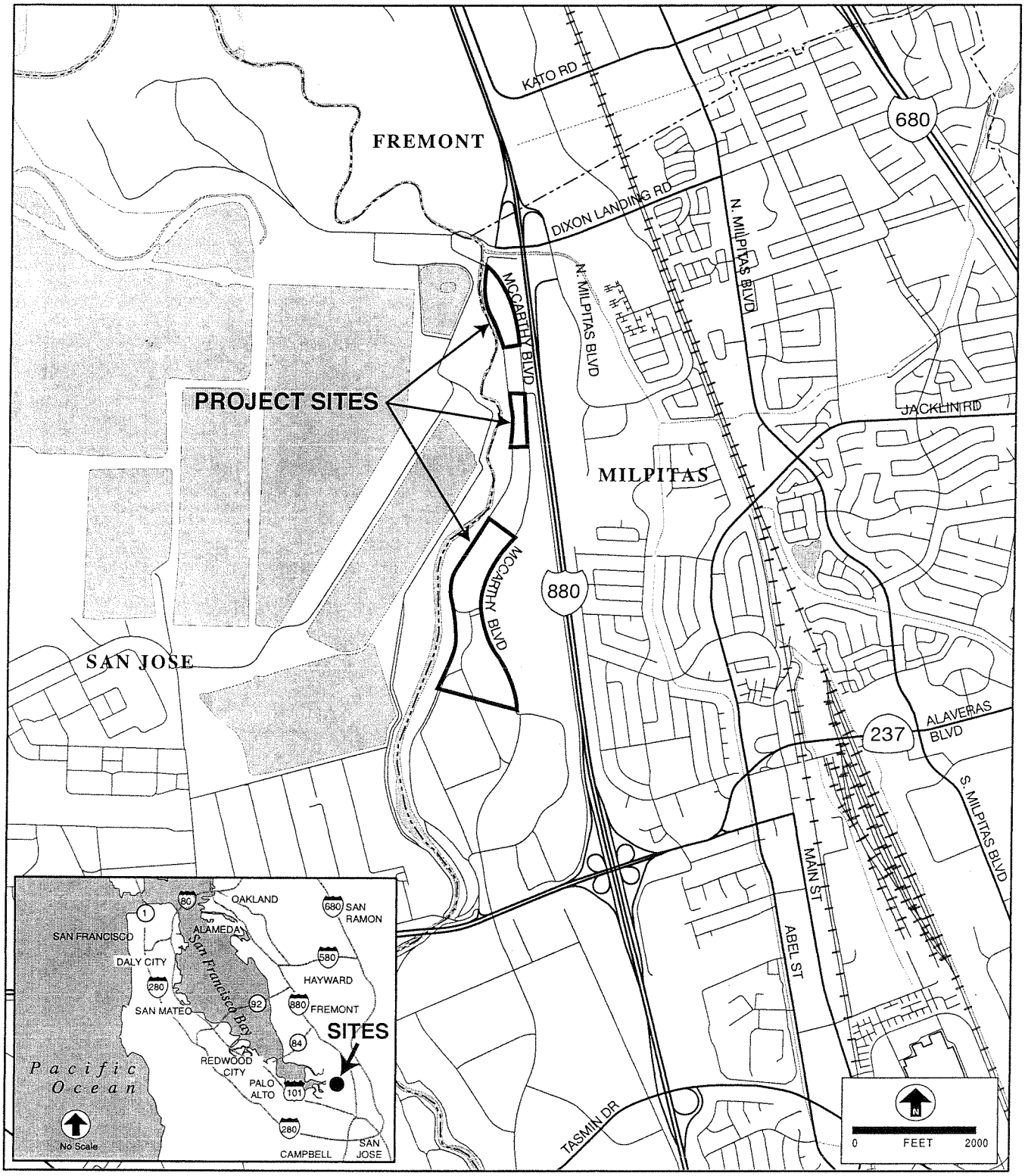
According to State law, the deadline for your response is 30 days after receipt of this notice; however, we would appreciate an earlier response, if possible. Please identify a contact person, and send your response to:

City of Milpitas
Attn: Sheldon S. Ah Sing, Senior Planner
455 East Calaveras Boulevard
Milpitas, CA 95035
(408) 586-3279

Project Title:	McCarthy Ranch Mixed Use Project
Project Applicant:	McCarthy Ranch LP
Project Location:	Three non-contiguous sites along the west side of North McCarthy Boulevard between State Route 237 (Calaveras Boulevard) and Dixon Landing Road in the City of Milpitas (see Figure 1).
Project Description:	The proposed project represents a final implementation phase of the City-approved McCarthy Ranch Master Plan along the northern reach of McCarthy Boulevard. The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres. The three properties are currently designated *Industrial Park and Manufacturing* on the Milpitas General Plan Land Use Map and zoned *Industrial Park* (MP) with a maximum floor area ratio (FAR) of 0.50. The proposed project would accommodate up to approximately 1.07 million square feet of office park and approximately 407,000 square feet of community shopping center floor area. The proposed office park uses would be consistent with current General Plan and zoning allowances. The community shopping center use would require a General Plan amendment and rezoning from *Industrial and Manufacturing*/MP to *Community Commercial*/C2.
Notice of Scoping Meeting:	Pursuant to CEQA Guidelines section 15082(c) (Notice of Preparation and Determination of Scope of EIR), the City will conduct a scoping meeting for the purpose of soliciting views of responsible agencies, agencies with jurisdiction by law, trustee agencies, and interested parties requesting notice, as to the

[1] *References:* California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a) and (b), 15103 and 15375.

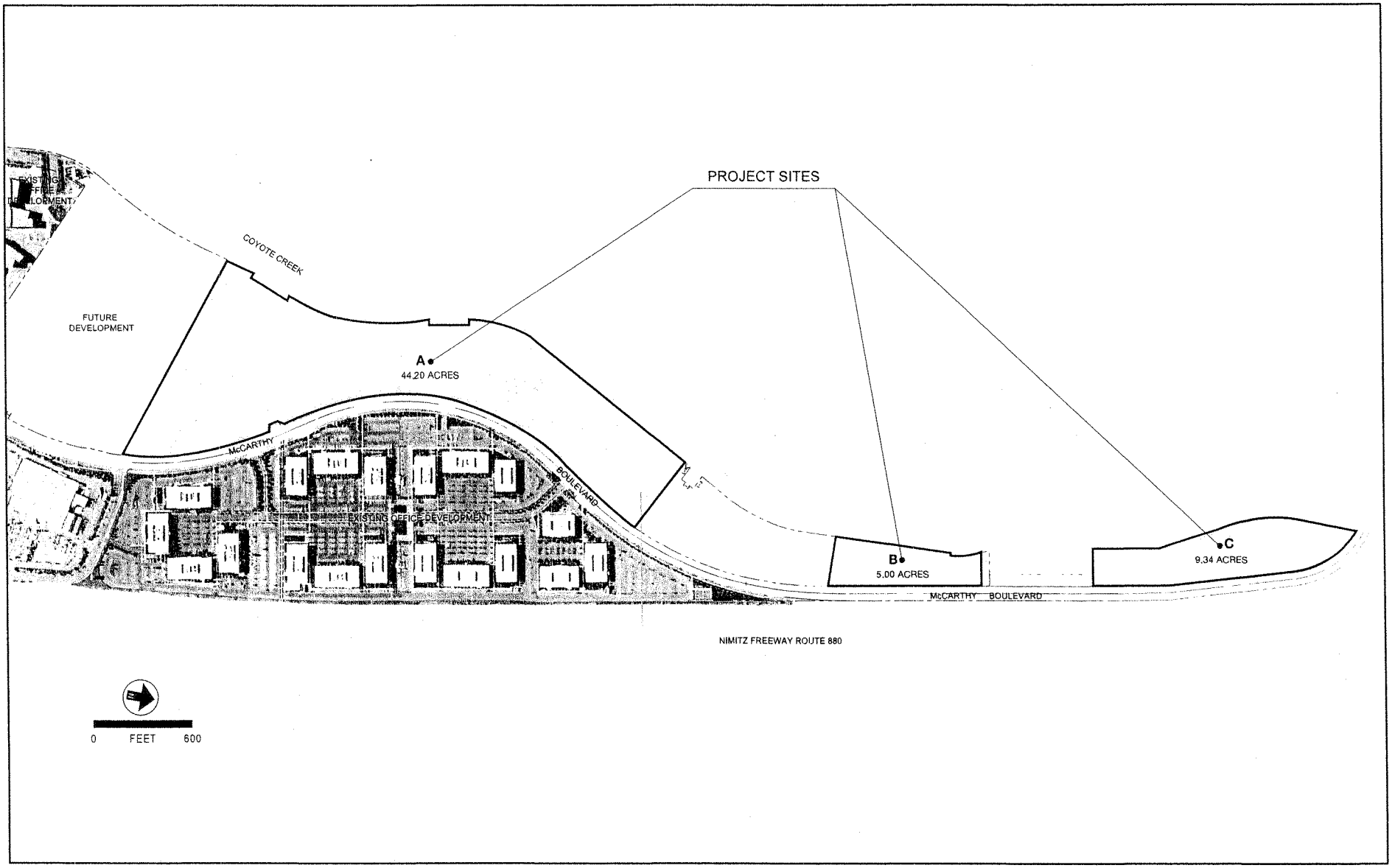
appropriate scope and content of the EIR. The scoping meeting will take place at 6:00 PM on Wednesday, October 15, 2008, in the City of Milpitas Civic Center 1st Floor Committee Conference Room, 455 East Calaveras Boulevard, Milpitas. Please contact Sheldon Ah Sing, Senior Planner, at (408) 586-3279 for further information.



SOURCE: Wagstaff and Associates

Figure 1

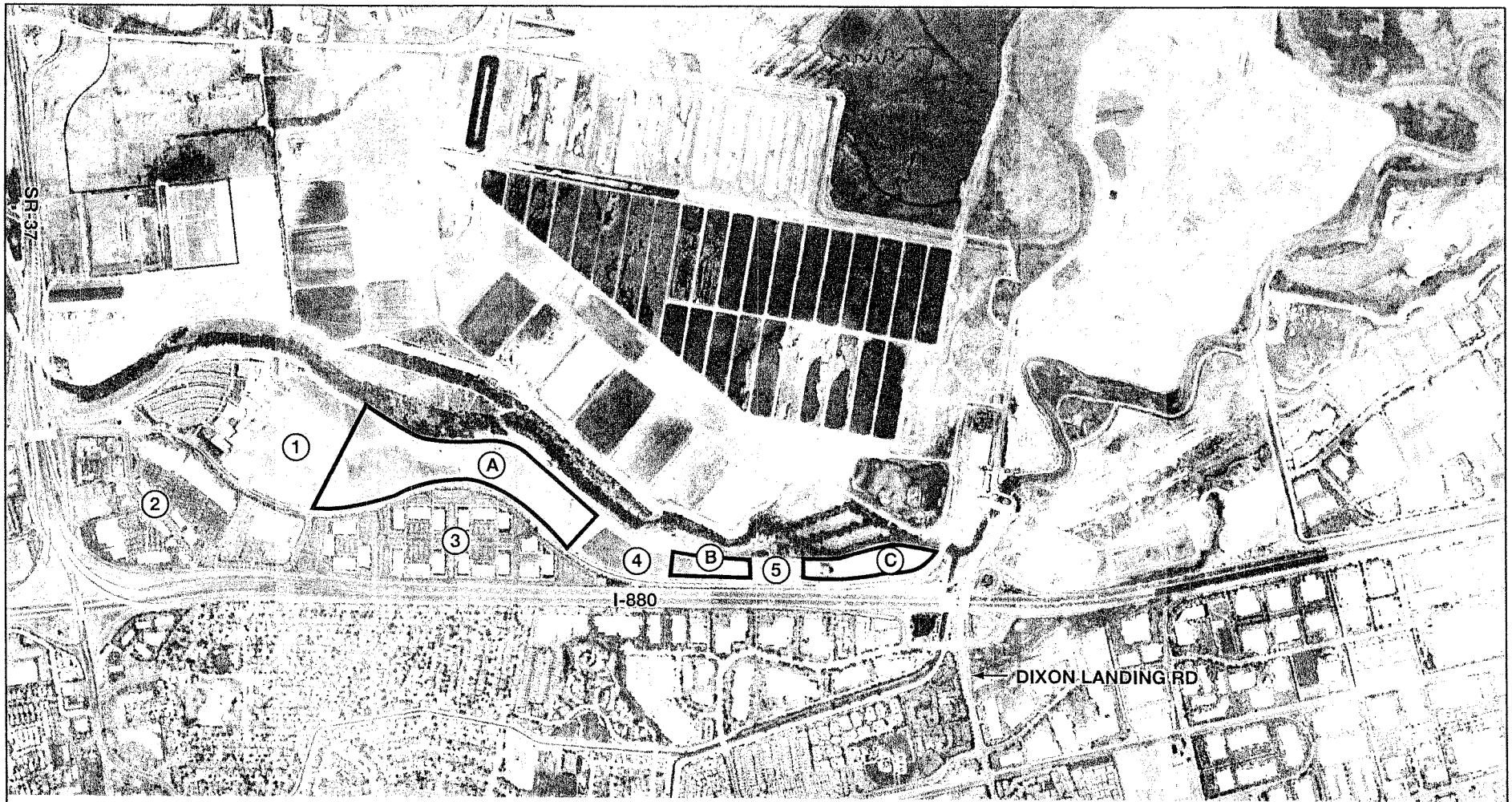
PROJECT LOCATION



SOURCE: McCarthy Ranch LP

Figure 2

PROJECT SITES



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PROJECT SITE

A	South Parcel	44.20 acres
B	Middle Parcel	5.00 acres
C	North Parcel	9.34 acres
TOTAL		58.54 acres

ADJACENT USES

1. Campus at McCarthy Ranch Project (industrial/office)
2. McCarthy Ranch Marketplace (commercial)
3. Irvine Business Park
4. Macronix site (Industrial Park zoning)
5. City sewer lift station

SOURCE: Wagstaff and Associates

Figure 3

PROJECT VICINITY

McCARTHY RANCH MIXED USE PROJECT
INITIAL STUDY AND ENVIRONMENTAL CHECKLIST FORM

1. PROJECT DESCRIPTION

1.1 Project Title: **McCarthy Ranch Mixed Use Project**

1.2 Lead Agency Name and Address:
City of Milpitas
455 East Calaveras Boulevard
Milpitas, CA 95035

1.3 Contact Person and Phone Number:
Sheldon S. Ah Sing, Senior Planner
Telephone: (408) 586-3279
FAX: (408) 586-3293

1.4 Project Location:

The project location is shown on Figure 1. The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres, located along the west side of North McCarthy Boulevard between SR 237 (Calaveras Boulevard) and Dixon Landing Road in the City of Milpitas.

1.5 Project Sponsor Name and Address:
McCarthy Ranch LP
15425 Los Gatos Boulevard, Suite 102
Los Gatos, California 95032
Contact: Joey McCarthy
Telephone: (408) 356-2300

1.6 General Plan Designation: Industrial Park and Manufacturing

1.7 Zoning: MP (Industrial Park)

1.8 Project Background:

(a) Prior to 1986. The three project sites are within the original McCarthy Ranch property, owned by the McCarthy Ranch family of Milpitas for over 100 years. Prior to 1985, the Ranch areas, including lands south of SR 237 and west of Coyote Creek, were generally in agricultural use, including cultivated row crops. The approximately 421-acre portion of the Ranch property bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road has been designated by the City of Milpitas for urban use ("Urban Reserve Area") since the early 1960s and since the early 1970s, for a mixture of industrial park and manufacturing uses.[1]

(b) 1986 Approval. In 1986, in response to an application from McCarthy Ranch, the City annexed the approximately 421-acre portion of the McCarthy Ranch area bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road and certified an associated *Milpitas Business Park Phase III EIR* (1986 EIR) and approved an *Industrial Park and Manufacturing* General Plan designation, MP (Industrial Park) zoning designation and associated McCarthy

[1]City of Milpitas, *Draft Environmental Impact Report for the McCarthy Ranch General Plan Amendment*, June 28, 1996 (SCN 94073003); page 2-4.

Ranch Master Plan for development of the area, establishing a maximum permitted FAR of 0.50.

(c) 1993 Approval. In 1993, the McCarthy family requested and the City approved an Addendum to the 1986 EIR (1993 EIR Addendum) and approved a General Plan amendment (GPA), rezoning and tentative map for the southern portion of the 1986 annexation, permitting development of the McCarthy Ranch Marketplace project (see Figure 3)

(d) 1997 Approval. In 1997, the City certified a new EIR (1997 EIR) and approved a GPA establishing a new Mixed Use (MX) designation and associated rezoning, updated McCarthy Ranch Master Plan and Design Guidelines submittal, and development agreement, that together specified an updated, mixed use development program for the approximately 203-acre undeveloped remainder of the McCarthy Ranch annexation area (Master Plan area), including approximately 100 acres of research and development (R&D), 75 acres of residential, 15 acres of highway commercial, and an extension of McCarthy Boulevard through the area.

(e) Settlement Agreement. The City of San Jose, Santa Clara Audubon Society and others took joint legal action to prevent development under the 1997 MX designation, arguing that it would be incompatible with adjacent conditions (i.e., the Santa Clara/San Jose Water Pollution Control Plant, Newby Island Landfill, and habitat values along Coyote Creek). A subsequent settlement agreement permitted development of the Master Plan area if it was re-designated back to non-residential use (Industrial Park and Manufacturing), and established that the City of San Jose would not object to subsequent development of non-residential uses under this re-designation provided that such development did not exceed an FAR of 0.35.

(f) 1999 Approval. In 1999, in response to the 1997 settlement agreement and a subsequent new application by McCarthy Ranch, the City certified a Supplemental EIR (1999 SEIR), tiered upon the 1997 EIR, and approved a GPA, rezoning and associated entitlements changing the land use designation from MX (Mixed Use) back to MP (Industrial Park) with a maximum permitted FAR of 0.50, and with an SEIR stipulation that any proposed increase in FAR beyond 0.35 "would require additional environmental review."

1.9 Description of Project:

(a) Current Application. McCarthy Ranch LP has submitted an application to the City of Milpitas for the proposed McCarthy Ranch Mixed Use Project. The proposed project represents a final implementation phase of the McCarthy Ranch Master Plan along the west side of North McCarthy Boulevard. The project is comprised of three noncontiguous properties--sites A, B and C--totaling approximately 58.5 acres, located along the west side of North McCarthy Boulevard between SR 237 (Calaveras Boulevard) and Dixon Landing Road (see Figures 1 and 2). The three properties are currently designated *Industrial Park and Manufacturing* on the Milpitas General Plan Land Use Map and zoned *Industrial Park* (MP) with a maximum floor area ratio (FAR) of 0.50.

The proposed project includes the following mix of office park and community shopping center land uses for the three project sites:

	Site A	Site B	Site C	Total
Site size (approx.)	44.20 acres	5.00 acres	9.34 acres	58.54 acres
Assessor's Parcel No.	22-29-36 (35.01 acres) and 22-30-37 (9.19 acres)	22-30-39	22-30-48	
Existing General Plan designation	Industrial Park and Manufacturing	Industrial Park and Manufacturing	Industrial Park and Manufacturing	
Proposed General Plan designation	No change	No change	General Commercial	
Existing zoning	MP (Industrial Park)	MP (Industrial Park)	MP (Industrial Park)	
Proposed zoning	No change	No change	C2 (General Commercial)	
Proposed land use	Office Park	Office Park	Community Shopping Center	
Maximum and Proposed FAR	0.50/0.50	0.50/0.50	0.50/0.30	
Proposed maximum floor area (approx.)	962,570 sq.ft.	108,900 sq.ft.	122,060 sq.ft.	1,193,530 sq. ft

(b) Possible Project Variation. Depending upon market conditions, the applicant may ultimately decide to retain the current MP (Industrial Park) zoning for project site C, rather than rezone site C to C2 (General Commercial). Under CEQA, an EIR is required to "...describe a range of reasonable alternatives to the proposed project"...with emphasis on alternatives that would mitigate the significant effects of the project. It has been initially determined that a project alternative that retains the current MP (Industrial Park) zoning for Site C--i.e., buildout with an office park use at an FAR of 0.50, similar to what is proposed for sites A and B--may have slightly reduced traffic and other impacts in comparison to the proposed project (rezoning of Site C to C2). The "Alternatives to the Proposed Project" chapter of the EIR will therefore include among the range of alternatives evaluated a project variation that retains the current MP (Industrial Park) zoning for site C.

(c) Existing Site Characteristics. The three project sites are located within the approximately 203-acre McCarthy Ranch Master Plan area. The City of Milpitas General Plan and McCarthy Ranch Master Plan provide for development of the area with a mix of commercial, residential, research and development (R&D) and industrial park uses.

Approximately 60 percent of the approximately 203-acre Master Plan area has been built out. The three project sites represent three of five remaining undeveloped sites within the 226-acre Master Plan area. Like all of the Master Plan area, the three sites are characterized by generally flat, valley floor topography and are generally void of natural vegetation due to past and remaining agricultural activities.

Site A remains in interim agricultural use, with most still actively cultivated for row crops. A McCarthy Ranch agricultural produce storage and packing facility remains in the center of site A, including approximately a dozen single-story buildings of various types and sizes--i.e., barns, produce storage and packing sheds, warehousing, seasonal worker housing, accessory storage tanks, equipment storage yards and parking area.

Sites B and C also remain in interim agricultural use, including areas cultivated for row crops. No structures exist on sites B or C.

(d) Site Access. Regional and local access to the three project sties is directly provided by North McCarthy Boulevard via the SR 237/Calaveras Boulevard/I-880 interchange immediately to the south and the Dixon Landing Road/I-880 interchange directly to the north.

1.10 Surrounding Land Uses and Setting:

Other properties along the west frontage of North McCarthy Boulevard include:

- the 65-acre Campus at McCarthy Ranch research and development/office complex located adjacent to the south boundary of project site A (location 1 on Figure 3), which has approved entitlements for up to 991,000 square feet of research and development/office space, and currently includes three existing two- and three-story research and development/ office buildings totaling approximately 465,000 square feet and an existing large surface parking area, and is subject to a pending proposal to increase the site FAR from 0.35 to 0.50 for a total site capacity of approximately 1,415,000 square feet of research and development/office space;

- the approximately 10-acre Macronix property, zoned for *Industrial Park* (MP), located between project sites A and B; and

- the City-owed Milpitas Sanitary Sewer Pump Station facility, occupying the approximately 7-acre property between project sites B and C (location 5 on Figure 3).

Existing land uses in the project vicinity along the opposite, east side of North McCarthy Boulevard include:

- the approximately 82-acre McCarthy Ranch Marketplace regional and community shopping center development (location 2 on Figure 3); and

- the approximately 75-acre Irvine Business Park office, R&D and light industrial campus (location 3 on Figure 3).

Coyote Creek and the Santa Clara Valley Water District-owned Coyote Creek open space and flood control corridor are located along the entire west boundary of the three project sites, separated from the three properties by an earthen levee ranging in height from 6 to 10 feet. Extensive sludge lagoons and drying beds associated with the Santa Clara-San Jose Water Pollution Control Plant (WPCP), additional cultivated agricultural areas, and a PG&E natural gas line terminal and electrical substation facility are located west of the levee.

1.11 Required Public Agency Approvals:

(1) CEQA Compliance: City certification of a new EIR describing the environmental consequences of development of project sites A and B with office park uses at a floor area ratio (FAR) of 0.50 (although an FAR of 0.50 on project sites A and B would be consistent with the current MP zoning of the two properties, the 1999 SEIR has indicated that a proposed FAR beyond 0.35 "would require additional environmental review").

(2) General Plan Amendment: City approval of a General Plan amendment to change the General Plan Land Use Map designation of site C from *Industrial Park and Manufacturing* to *General Commercial.*

(3) Rezoning: City approval of a corresponding rezoning to change the Zoning Ordinance designation of site C from *Industrial Park* (MP) to *General Commercial* (C2).

(4) Other Required City Approvals: Project implementation is also expected to eventually require City approval of detailed project site, architectural and landscape plans; parcel map; possible development agreement(s); possible Conditional Use Permit for commercial uses within the project Community Commercial Center component; a sign program; a demolition permit to clear existing agricultural structures on project site A; and grading permit(s), building permit(s), water and sewer hook-ups, and other ministerial actions.

(5) Other Jurisdictional Approvals: The applicant would be required to file a *Notice of Intent* and a *Storm Water Pollution Prevention Plan (SWPPP)* for approval by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in accordance with National Pollution Discharge Elimination System (NPDES) requirements.

2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below may be affected by this project, as indicated by the checklist and narrative on the following pages.

- ■ Aesthetics
- ■ Agricultural Resources
- ■ Air Quality
- ■ Biological Resources
- ■ Cultural Resources
- ■ Geology/Soils
- ■ Hazards & Hazardous Materials
- ■ Hydrology/Water Quality
- ■ Land Use/Planning
- □ Mineral Resources
- ■ Noise
- □ Population/Housing
- ■ Public Services
- □ Recreation
- ■ Transportation/Traffic
- ■ Utilities/Service Systems
- ■ Mandatory Findings of Significance

3. DETERMINATION:

On the basis of this initial evaluation:

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

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

□ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

□ I find that although the proposed project COULD have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Sheldon S. Ah Sing
Senior Planner
City of Milpitas
September 16, 2008

4. EVALUATION OF ENVIRONMENTAL IMPACTS

The purpose of this Initial Study evaluation is to identify any potential significant adverse environmental effects that may occur as a result of the proposed project. The analysis format incorporates the list of questions included in the City's normal Initial Study environmental checklist form, which has been derived from the latest (2008) *CEQA Guidelines*, and provides for one of the following answer choices for each impact issue: POTENTIALLY SIGNIFICANT IMPACT, LESS-THAN-SIGNIFICANT WITH MITIGATION INCORPORATED, LESS-THAN-SIGNIFICANT IMPACT, or NO IMPACT. Each answer is followed by an explanation.

4.1 Aesthetics. *Would the project:*

a. Have a substantial adverse effect on a scenic vista?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The Milpitas segment of I-880 is designated as an important "scenic connector" in the City of Milpitas General Plan. The proposed development of the C2 (General Commercial) component on site C and MP (Industrial Park) component on site B could be visible to varying degrees from I-880. The proposed project is located within an extensively urbanized freeway corridor environment. Project buildout characteristics would be required to comply with the City's existing C2 and MP zoning controls and as a result would be generally consistent in character, building type, height and mass with existing similar C2 and MP development in the project vicinity, including the existing McCarthy Ranch Marketplace shopping center development and existing Irvine Business Park development along the opposite side of North McCarthy Boulevard. Nevertheless, because the project includes a maximum FAR of 0.50, and the City certified 1999 McCarthy Ranch General Plan Amendment SEIR (1999 SEIR) indicates that any proposed increase in FAR beyond 0.35 "would require additional environmental review," the new EIR will address the potential environmental effects of the proposed project on views from I-880 and identify any mitigation measures (design guidelines, etc.) warranted to avoid or minimize adverse project effects on scenic vistas.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Answer: NO IMPACT

Explanation: There are no state-designated scenic highways near the project sites (the I-880 and SR-237 corridors through Milpitas are not designated State Scenic Highways).

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.1.a above.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project site is located within an existing, highly-developed business park and community shopping center environment with extensive existing sources of light and glare. Any project-related exterior lighting features, including illuminated signs, would be subject to existing City exterior lighting controls. Nevertheless, possible light and glare issues associated with project-related intensification of development in the area, including associated possible effects on day and nighttime views in the area, will be evaluated in the EIR and any warranted mitigations identified.

4.2 Agricultural Resources. *(In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.) Would the project:*

a. 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?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project will displace existing interim agricultural activities (row crops on all three sites and the existing produce storage and packing facility on site A). Although the project area has been designated for conversion to urban use for over four decades and is designated for Industrial and Manufacturing use in the City's current General Plan, the relationship of the existing onsite agricultural operations to the CEQA definition of Prime Farmland, Unique Farmland and Farmland of Statewide Importance will be briefly described and any project-associated significant impacts identified. The evaluation will include a review and summary of 1996 EIR and 1999 SEIR findings regarding this issue.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Answer: NO IMPACT

Explanation: The project sites are no longer zoned for agricultural use and no Williamson Act contracts exist on any of the three sites. The current project site zoning designations no longer allow agricultural uses; however, a conditional use permit

may be obtained in accordance with the non-conforming provisions of the City's Zoning Ordinance.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See item 4.2.a above.

4.3 Air Quality. *(Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) Would the project:*

a. Conflict with or obstruct implementation of the applicable air quality plan?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The proposed project would not be expected to generate additional point source or vehicular air emissions beyond those anticipated in the 1997 EIR and 1999 SEIR. Nevertheless, the new EIR will include the results of a project air emissions assessment conducted to comply with the latest version of the BAAQMD CEQA Guidelines, with emphasis on identification (modeling) of project-related indirect (mobile source) emissions. Typically, the mobile source pollutant of greatest concern is localized carbon monoxide (CO) concentrations, and CO concentrations are greatest near intersections. Following the BAAQMD CEQA Guidelines, future CO levels with and without the project will be modeled near the worst-case intersection or intersections used by project traffic, using a screening form of the CALINE-4 computer model. The modeling results will be compared to state and federal ambient air quality standards to determine impact significance.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: **Construction-Period Emissions.** The potential impacts of project construction operations, including earthmoving, hauling, demolition of buildings, construction of new buildings, and other construction activities, were addressed in the 1996 EIR and 1999 SEIR. Any project-related construction activities would be subject to existing mitigation requirements identified in these two CEQA documents. The new EIR will review these previous findings and make any revisions necessary to comply with current BAAQMD and City requirements.

Long-Term Increases in Local and Regional "Criteria" Pollutant Emissions. See explanation under item 4.3.a above.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The San Francisco Bay Area is a designated non-attainment area for carbon monoxide. As discussed under item 4.3.a above, total air quality emissions from project long-term operations could be significant under current BAAQMD guidelines, due primarily to increased traffic generation. Resultant project contributions to cumulative levels of criteria pollutants will be evaluated in the EIR.

d. Expose sensitive receptors to substantial pollutant concentrations?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: As indicated under item 4.3.a above, the proposed project and associated increases in local vehicular trips and intersection congestion could contribute to deterioration in air quality near a worst-case intersection or intersections used by project traffic. The EIR will determine whether there are any existing or planned sensitive receptors (schools, hospitals, senior housing facilities, etc.) within one-quarter mile of any intersections identified as potentially affected by the project (see item 4.15.a herein).

e. Create objectionable odors affecting a substantial number of people?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: During the short-term project construction period, various diesel-powered vehicles and equipment in use on the site would create odors. These odors would be temporary and are not likely to be highly noticeable beyond the project boundaries. The proposed project would consist of typical office, industrial park and community commercial uses within an existing office, industrial park and community commercial environment. Other than ordinary restaurant-related cooking odors which are locally regulated, project operation would not include any activities that would create significant objectionable odors.

Project site A, however, is within the "odor contour" identified in the 1997 EIR related to the nearby Santa Clara-San Jose Water Pollution Control Plant sludge and drying ponds. Associated project exposure impacts and mitigation needs will be described.

4.4 Biological Resources. *Would the project:*

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The 1986 EIR, 1993 EIR Addendum, 1997 EIR (1996 DEIR) and 1999 SEIR have addressed McCarthy Ranch Master Plan buildout-related impacts on biological resources as a result of site grading, road building, and infrastructure installation, and direct wildlife disturbance by construction activities and human habitation (associated with previously-proposed residential components). These previous CEQA documents have also addressed associated mitigation needs, including mitigations for potential impacts on special status plant and animal species protected under the Federal Endangered Species Act, California Endangered Species Act and other regulations. The currently proposed McCarthy Ranch Mixed Use Project would not be expected to result in additional significant impacts to biological resources, or a substantial increase in the severity of impacts, beyond those identified in these previous City-certified CEQA documents.

The 1999 SEIR-identified mitigation requirements for potential development impacts on burrowing owl habitat (MM 3.I-1) and on Coyote Creek (MM3.I-5) would continue to apply to the proposed project. These impact findings and mitigation requirements will be reviewed during EIR preparation to verify that they remain adequate. Any associated changes in project circumstances, including pertinent changes in jurisdictional special status species listings or mitigation protocols since City certification of the 1999 SEIR will be identified.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See item 4.4.a, above.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project site appears to contain no jurisdictional wetlands. The most recent jurisdictional wetland determination status will be reviewed to verify this finding.

U.S. Army Corps of Engineers nationwide or regional permits have already authorized certain activities provided specific conditions are met. If necessary, the completed application for the project will be submitted to the Corps to determine whether the proposed activity is already authorized.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.4.a above.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Answer: NO IMPACT

Explanation: The project site does not contain any sensitive habitat protected by the adopted City of Milpitas General Plan, the City tree preservation provisions, or any other document adopted by the City of Milpitas.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or state habitat conservation plan?

Answer: NO IMPACT

Explanation: No conservation plan applies to the project site. ***[Verify re: Burrowing Owls. Is the project site subject to a regional Burrowing Owl Mitigation Plan?]***

4.5 Cultural Resources. *Would the project:*

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines 15064.5?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The City-certified 1997 EIR and 1999 SEIR indicate that there are no known structures on the project sites that could be considered significant historical resources. Nevertheless, the project site is located in an area of probable archaeological and historical sensitivity due to its location near a local waterway. The EIR will address the known presence of historic and archaeological sites in the project area and the likelihood for unknown resources to be found during construction. Pursuant to California Senate Bill 18, the proposed General Plan amendment for project site C will be referred to the contact list maintained by the

California Native American Heritage Commission for tribal consultation prior to City action on the amendment request. Mitigation measures will be identified for any identified potentially significant impacts, as warranted.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See item 4.5.a above.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Answer: NO IMPACT

Explanation: The project site is located within an active urban development area. The area has no history of discovery of unique paleontological resources or unique geologic features. No paleontological resources or unique geologic features were discovered during the recent construction of the Irvine Business Park and McCarthy Ranch Marketplace projects. Similarly, project development would not be expected to alter, damage, or destroy a paleontological resource or unique geologic feature.

d. Disturb any human remains, including those interred outside of formal cemeteries?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.5.b above. Mitigation will be identified or cited as necessary in the new EIR in order to reduce or avoid any cultural resource impact potentials identified in subsection 4.5.a above involving the potential disturbance of human remains, including applicable local (County Coroner) and state (Native American Heritage Commission) reporting requirements.

4.6 Geology and Soils. *Would the project:*

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Answer: NO IMPACT

Explanation: No active faults are known to occur on the project site, nor is the site located in an Alquist-Priolo Special Studies Zone;[1] therefore, fault rupture is not expected. The project would result in no impact involving risk of loss, injury, or death due to earthquake fault rupture.

ii) Strong seismic ground shaking?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: Although no active faults are located in Milpitas, the project area is within a seismically active region and could experience strong seismic ground shaking and related effects in the event of an earthquake on one of the identified active or potentially active faults in the region (e.g., San Andreas fault, Hayward fault, and Calaveras fault). The project site is located in Seismic Zone 4, one of the most seismically active regions in the United States. These local faults are considered active and have a long history of seismic activity; therefore, the project structures may be subject to earthquake hazards (e.g., ground shaking, liquefaction, unstable conditions) during their economic lifetime.

The engineering techniques and standards adopted by the State of California and the City of Milpitas for geotechnical building safety, including the Uniform Building Code provisions for Seismic Zone 4, are widely known and accepted in the professional fields of design and construction. Individual solutions for particular developments to achieve Uniform Building Code compliance are typically, and most efficiently, specified at the detailed project design phase. For the proposed McCarthy Ranch Mixed Use Project, the specific construction details addressing exterior and interior seismic requirements for the proposed project buildings will be reviewed and approved by the City's Building and Safety Division prior to the issuance of building permits for those structures. Therefore, potential additional project impacts associated with strong seismic ground shaking and seismic-related ground failure are considered less-than-significant.

iii) Seismic-related ground failure, including liquefaction?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.6.a(ii) above. Nevertheless, the levee system along the western edge of the project sites has been installed to protect the project from historical flooding problems in the vicinity. The potential for seismic-related levee failure and associated implications for the project site will be described in the EIR and any mitigation needs will be identified as warranted.

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[1]Department of the Interior, United States Geological Survey. Map MF-355: *Active Faults, Probable Active Faults, and Associated Fracture Zones, San Mateo County, California.* Compiled by Robert D. Brown, Jr., 1972.

iv) Landslides?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project site is located in an area of essentially level ground. Nevertheless, the levee system along the western edge of the project sites has been installed to protect the Master Plan area from historical flooding problems. The potential for seismic-related levee failure and associated implications for the project site will be described in the EIR and any warranted mitigation needs will be identified.

b. Result in substantial soil erosion or the loss of topsoil?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: Project grading and construction activities may result in minor erosion or the minor loss of some topsoil. City-required standard grading- and construction-period erosion control techniques would mitigate this impact to a less-than-significant level.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See items 4.6.a.ii and iii above.

d. Be located on expansive soil (as defined in Table 18-1-B of the 1994 Uniform Building Code) creating substantial risks to life or property?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: Following standard City practice, the project applicant will be required to comply with City of Milpitas Engineering Division requirements pertaining to expansive soils, including incorporation of any specific engineering measures deemed warranted for the stabilization of all soil materials relied on to provide subgrade support or encasement. To the satisfaction of the City Engineer, the applicant will be required to specifically identify measures to be employed to control expansive soils and minimize damage to proposed site improvements. Implementation of these established requirements will result in a less-than-significant impact resulting from expansive soils.

4.7 Hazards and Hazardous Materials. *Would the project:*

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The proposed project office park and community shopping uses would involve the normal transport, use, storage, and disposal of hazardous materials. Site C is traversed by existing electrical transmission lines. A determination will be made in the new EIR regarding any associated potentially significant hazards or hazardous material impacts, and any associated mitigation needs.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project site is located in proximity to the Santa Clara-San Jose WDCP sludge storage and drying ponds, the BFI-Newby Island Landfill, and the now closed City of Milpitas Sanitary Treatment Plant. The groundwater remediation status of the three project sites associated with these and any other identified nearby sources of groundwater contamination will be reviewed and described in the EIR. Existing potentials for onsite groundwater or soil contamination associated with existing and past agricultural activities, including existing and previous fuel storage facilities, will also be evaluated. Any associated potentially significant project impacts and mitigation needs (jurisdictional remediation protocols) will be identified as warranted.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Answer: NO IMPACT

Explanation: No existing or proposed school is located within one-quarter mile of the project site.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Answer: NO IMPACT

Explanation: The project site is not located on the State Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances List ("Cortese List") compiled pursuant to Government Code Section 65962.5.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Answer: NO IMPACT

Explanation: The project site is not located within an airport-related "restricted zone" (e.g., noise exposure/land use compatibility, height limit, airport obstruction) or within two miles of a public airport.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Answer: NO IMPACT

Explanation: There are no private airstrips in the project vicinity.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Answer: NO IMPACT

Explanation: The project would not be expected to interfere with any emergency response and evacuation plans approved by the City.

h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Answer: NO IMPACT

Explanation: The site is not within or adjacent to wildlands.

4.8 Hydrology and Water Quality. *Would the project:*

a. Violate any water quality standards or waste discharge requirements?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: Following standard City practice, the project applicant will be required to provide the City's Engineering Division with a grading and drainage plan for the proposed new construction for review and approval, which must meet the latest NPDES water quality protection standards. Any associated construction period water quality effects, therefore, will not require further supplemental environmental analysis.

With completion of construction, all project-disturbed areas would be stabilized underneath the new buildings, pavement, and landscaping. As a result, the threat of long-term erosion or increased turbidity and sedimentation from project development would be less-than-significant.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Answer: NO IMPACT

Explanation: Groundwater in the project vicinity does not provide a source of drinking water. Water supply for the project would be provided by the City of Milpitas, and groundwater supplies would not be used. Therefore, the proposed new development would not result in new significant impacts to groundwater supply or recharge.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: There are no streams present on the three project sites. The project sites are separated from adjacent Coyote Creek and the Coyote Creek open space and flood control corridor by an existing 6- to 10-foot high earthen levee. Upon project completion, storm drainage from the project site would discharge into the existing municipal storm drainage system serving the McCarthy Ranch Master Plan area. Project development would therefore not result in significant changes to local drainage patterns.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project would not involve the alteration of the course of an existing stream; however, the project would replace existing cultivated agricultural land with impermeable urban surfaces, and thereby contribute to anticipated cumulative increases in the rate and volume of stormwater runoff into the local municipal storm drainage system. The effects of the project and project plus cumulative stormwater runoff increases on the capacity and adequacy of the existing and planned local storm drainage system will be evaluated in consultation with City engineering staff and any potentially significant project-related impact or mitigation need beyond the City's existing stormwater management plan for the area will be identified.

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.8.d above.

f. Otherwise substantially degrade water quality?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: Development of the proposed project could result in a substantial increase in the discharge of non-point source pollutants into the local municipal storm drainage system and San Francisco Bay beyond what occurs under existing conditions and therefore could contribute to a cumulatively significant degradation of water quality. The EIR will address this potential effect and identify any warranted mitigation needs.

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Answer: NO IMPACT

Explanation: The project does not include housing.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.8.g above.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.8.g above.

j. Inundation by seiche, tsunami, or mudflow?

Answer: NO IMPACT

Explanation: The project site is relatively level. The distance between the Coyote Creek reach adjacent to the project site and Calaveras Point in San Francisco Bay is approximately seven miles; the project location is not susceptible to inundation by seiche, tsunami, or mudflow.

4.9 Land Use and Planning. *Would the project:*

a. Physically divide an established community?

Answer: NO IMPACT

Explanation: The project sites are within the McCarthy Ranch Master Plan boundary. The proposed project uses are generally consistent with the provisions of the Master Plan. The Master Plan area is separated from greater Milpitas by I-880. The proposed project would not physically divide any established community.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the City of Milpitas General Plan and Milpitas City Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project site and surrounding McCarthy Ranch Master Plan area have been designated for urban use for over four decades. The McCarthy Ranch Master Plan area generally bounded by I-880, SR 237, the Coyote Creek corridor and Dixon Landing Road was annexed to the City in 1986 with an adopted *Industrial Park and Manufacturing* General Plan designation and corresponding MP (Industrial Park) zoning designation and associated Master Plan, establishing a maximum permitted FAR of 0.50. Subsequently, the City's 1994 General Plan update designated the Master Plan area for similar Industrial Park, Manufacturing and Warehousing use.

In 1993, the City approved a General Plan Amendment, rezoning and subdivision map establishing an updated McCarthy Ranch Master Plan and development agreement, including designations and entitlements permitting development of the McCarthy Ranch Marketplace regional and community shopping development at the southern end of the Master Plan area.

In 1997, the City approved another General Plan Amendment, rezoning (Master Plan revision) and development agreement permitting a mixed use development program for the remaining approximately 203-acre undeveloped area, including approximately 100 acres of R&D, 75 acres of residential and 15 acres of highway commercial, and the extension of North McCarthy Boulevard through the area.

In 1999, in response to legal action by and a settlement agreement with the City of San Jose, Santa Clara Audubon Society and others, a settlement agreement was reached that essentially redesignated the Master Plan area back to non-

residential use (Industrial Park and Manufacturing) and established that the City of San Jose would not object to subsequent development of non-residential uses in the area under this redesignation, provided that such development did not exceed an FAR of 0.35 and did not include overnight stay facilities. Subsequently in 1999, the City approved the most recent General Plan Amendment, rezoning and Master Plan revision for the area, re-establishing the *Industrial Park and Manufacturing* designation and corresponding MP (Industrial Park) zoning with a maximum FAR of 0.50 for all of the remaining undeveloped area. In response to the settlement agreement, the CEQA documentation (SEIR) for this 1999 GPA and rezoning analyzed a buildout scenario for the remaining approximately 203-acre undeveloped area that did not exceed an FAR of 0.35. The 1999 SEIR indicated that any future proposed increase in FAR beyond 0.35 "would require additional environmental review."

As indicated on page 3 herein, the current McCarthy Ranch Mixed Use Project proposal for project sites A, B and C includes the following mix of office park and community shopping center (highway commercial) uses:

	Site A	Site B	Site C	Total
Site size (approx.)	44.20 acres	5.00 acres	9.34 acres	58.54 acres
Existing General Plan designation	Industrial Park and Manufacturing	Industrial Park and Manufacturing	Industrial Park and Manufacturing	
Proposed General Plan designation	No change	No change	General Commercial	
Existing zoning	MP (Industrial Park)	MP (Industrial Park)	MP (Industrial Park)	
Proposed zoning	No change	No change	C2 (General Commercial)	
Proposed land use	Office Park	Office Park	Community Shopping Center	
Maximum and Proposed FAR	0.50/0.50	0.50/0.50	0.50/0.30	
Proposed maximum floor area (approx.)	962,570 sq.ft.	108,900 sq.ft.	122,060 sq.ft.	1,193,530 sq. ft

As shown above, the proposed community shopping center on site C use would require a General Plan Amendment and rezoning from *Industrial Park and Manufacturing*/MP to *General Commercial*/C2. In addition, the proposed 0.50 FAR for sites A and B, although consistent with current City zoning allowances for these two MP-zoned properties, would exceed the 0.35 FAR called for in the settlement agreement and addressed in the 1999 SEIR and therefore "would require additional environmental documentation"--i.e., a new EIR.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

Answer: NO IMPACT

Explanation: No habitat conservation plans or natural community conservation plans apply to the project site.

4.10 Mineral Resources. *Would the project:*

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Answer: NO IMPACT

Explanation: No known mineral resources, as designated by the California Division of Mines and Geology or in the City of Milpitas General Plan, have been identified on the project site or in the project vicinity.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Answer: NO IMPACT

Explanation: See explanation under item 4.10.a above.

4.11 Noise. *Would the project result in:*

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The potential noise impacts of McCarthy Ranch Master Plan buildout, including long-term operational and increased traffic noise and short-term construction period noise impacts on the surrounding area, have been evaluated, and associated mitigation requirements identified, in the 1986 EIR, 1997 EIR, and 1999 SEIR. These previous evaluations will be reviewed and updated if and as warranted to ensure that the new EIR adequately addresses the noise implications of the proposed McCarthy Ranch Mixed Use Project.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The proposed project would not include uses or activities that are expected to produce excessive groundborne vibration or noise levels. There are no known existing sources of excessive groundborne noise in the project vicinity. Temporary groundborne noise impacts associated with Master Plan area construction activities have been generally addressed in the 1986 and 1997

EIRs. The new EIR scope will include evaluation of site-specific construction activities anticipated within project sites A, B and C to determine whether any construction equipment or techniques (pile driving, etc.) are anticipated which may generate excessive temporary groundborne vibration impacts on adjacent uses. Associated mitigation will be identified if warranted.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.11.a above.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.11.a above.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Answer: NO IMPACT

Explanation: The project site is not located within an airport land use plan referral area or within two miles of a public use airport.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Answer: NO IMPACT

Explanation: There are no private airstrips in the project vicinity.

4.12 Population and Housing. *Would the project:*

a. Induce substantial 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)?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: The proposed project includes no residential component and would not be expected to induce substantial population growth either directly or indirectly in the area.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: Existing temporary worker housing structures provided by the McCarthy Ranch operation on site A are being eliminated for purposes unrelated to the proposed project. No permanent housing would be displaced by the project.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: See item 4.12.b above.

4.13 Public Services.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, 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:

a. Fire protection?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The anticipated cumulative effects of McCarthy Ranch Master Plan buildout on local public service and utility demands and capacities, including police services, fire protection services, schools, parks and recreation, library services, sewer service, and water service, were addressed in the City-certified 1986 EIR (section 3.D of the July 1996 Draft EIR). The current McCarthy Ranch Mixed Use Project EIR scope will include an updated evaluation, in consultation with local service providers, of the availability of local public facilities and service systems, the project-specific contribution to associated cumulative service demands, and associated requirements for construction of new facilities, if any. Mitigation measures for any identified significant impacts due to associated public service facility construction will be described as warranted.

b. Police protection?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.13.a above.

c. Schools?

Answer: LESS THAN SIGNIFICANT IMPACT

Explanation: The current McCarthy Ranch Mixed Use Project has no residential component and would not result in the need to provide for new or altered public school or park facilities, the construction of which would cause significant environmental impacts. The project would be required to pay state-authorized school-district established school impacts fees for new commercial projects.

d. Parks?

Answer: LESS THAN SIGNIFICANT IMPACT

Explanation: See explanation under item 4.13.c above.

e. Other public facilities?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.13.a above.

4.14 Recreation.

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: See explanation under item 4.13.a above.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: See explanation under item 4.13.a above.

4.15 Transportation/Traffic. *Would the project:*

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The proposed McCarthy Ranch Mixed Use Project, in combination with other anticipated cumulative development in the Master Plan area and elsewhere in the nearby Milpitas/San Jose vicinity, would generate substantial additional daily and peak-hour trips on the local and regional roadway system. The new EIR will include an evaluation of project, project-plus-background, and project-plus-cumulative impacts on local and regional roadway system operation as well as on local pedestrian and bicycle provisions and local and regional transit provisions, using methodologies advocated by the City and Santa Clara Valley Transportation Authority (VTA). Mitigation measures will be identified and fair share mitigation responsibilities indicated for any identified potentially significant impacts.

b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.15.a above.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Answer: NO IMPACT

Explanation: The project sites are not located within an existing airport land use plan referral area and the project would not cause any change in air traffic patterns.

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Answer: NO IMPACT

Explanation: The project does not propose any substantial modifications to the local roadway system or any land uses which would be incompatible with local transportation activities.

e. Result in inadequate emergency access?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: Following standard practice, any subsequent specific development proposal would be subject to the City's established fire and other emergency access requirements as a condition of approval.

f. Result in inadequate parking capacity?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: Following standard practice, the proposed project would be subject to the City's established parking requirements as a condition of approval. Project-specific parking provisions will be formulated and finalized in consultation with City staff.

g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project's circulation features and transit provisions may or may not be in compliance with adopted City policies and standards in support of alternative transportation modes. This issue will be addressed in the new EIR.

4.16 Utilities and Service Systems. *Would the project:*

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The project would be subject to applicable City and Regional Water Quality Control Board wastewater treatment requirements. Project wastewater treatment demands, the adequacy of local and San Jose/Santa Clara Water Pollution Control Plant capacity to serve the project demands, and any warranted project-specific mitigation needs, will be described in consultation with the City.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanations under item 4.16.a above and item 4.16.d below.

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.8.c above.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Answer: NO IMPACT

Explanation: The project size meets the threshold requiring preparation of a Water Supply Assessment by the City's Public Works Department pursuant to State SB 610, for incorporation into the Draft EIR. The City will complete a WSA which will indicate that the proposed project development characteristics are consistent with the current Public Works Department-prepared Master Water Plan.

e. 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?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: See explanation under item 4.16.a above.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: The adequacy of existing solid waste disposal services in Milpitas to serve the construction period and long-term (operational) solid waste disposal needs of the project will be described in consultation with City staff. Mitigation needs will be identified if warranted.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

Answer: LESS-THAN-SIGNIFICANT IMPACT

Explanation: As a matter of standard City policy, all anticipated project-related activity (e.g., construction, project operation) would be required to comply with all applicable federal, state, and local statutes and regulations related to normal solid waste disposal (e.g., recycling requirements). No unique or special hazardous management needs are anticipated.

4.17 Mandatory Findings of Significance.

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: This Initial Study has determined that project-related cultural resources impacts may be potentially significant (see items 4.4 and 4.5). These potential effects will be addressed in the new EIR and a determination made regarding impact significance and associated mitigation requirements.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: This Initial Study has determined that some project impacts (e.g., air quality, public services, traffic, utilities) could be cumulatively considerable. The potential cumulative impacts of the proposed project in conjunction with pending and anticipated development elsewhere in the Milpitas vicinity will be evaluated in the EIR.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Answer: POTENTIALLY SIGNIFICANT IMPACT

Explanation: Project effects identified in this Initial Study as having possible substantial adverse impacts on human beings, either directly or indirectly, include aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation/traffic, and utilities/service systems, as described under items 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8, 4.11, 4.13, 4.15, and 4.16, respectively.

APPENDIX 20.2

SUPPLEMENTAL TRAFFIC INFORMATION: MILPITAS INTERIM CONDITIONS

APPENDIX 20.2: MILPITAS INTERIM TRAFFIC CONDITIONS

(a) 2030 Cumulative Traffic Conditions. Draft EIR Chapter 14, Transportation and Circulation, includes an analysis and discussion of anticipated cumulative traffic conditions without and with the project, pursuant to CEQA Guidelines section 15130 (Discussion of Cumulative Impacts). As explained on Draft EIR page 14-45, cumulative roadway operational conditions were evaluated based on projected year 2030 traffic volumes on the "study" roadway network without and with project traffic volumes. The 2030 cumulative traffic volume forecasts were determined using the Milpitas version of the Santa Clara Valley Transportation Authority (VTA) CMP Year 2030 Travel Demand Forecast (TDF) Model. The VTA TDF model forecasts are based on projections of regional growth maintained by the Association of Bay Area Governments (ABAG).[1] Cumulative travel demand forecasts from the Milpitas version of the VTA TDF model were also adjusted as necessary to accurately reflect existing and anticipated future development along McCarthy Boulevard and the currently pending Bayside Market Place Shopping Center (aka Creekside Project) in Fremont.

(Those Fremont projects that have been recently approved, are under construction, or recently completed but not yet fully occupied, and may affect the EIR study roadway facilities, have been included in the Draft EIR traffic analysis "Background" scenario, as explained on DEIR page 14-22)

(b) Milpitas Interim Traffic Conditions. For City of Milpitas local transportation planning purposes related to the McCarthy Ranch Mixed Use project, separate from the CEQA compliance process, a ***"Milpitas interim traffic conditions analysis"*** has also been completed which has been intentionally limited to pending nearby projects in Milpitas only, for use in determining project fair share responsibilities for those local interim roadway improvement needs over which the City has exclusive control.

There are several development projects within the city limits that are currently pending (i.e., for which applications have been filed) but have not been approved for construction. Because these pending nearby Milpitas projects have not yet been approved, they were not included in the chapter 14 Background Conditions analysis. However, if these projects are approved in the near future, near term traffic conditions would be affected. The following operational analysis has therefore been conducted that addresses traffic volumes generated by the following four pending Milpitas projects (in addition to the McCarthy Ranch Project) to determine interim traffic conditions at local intersections:

- *Milpitas Square*--Mixed-use development of 900 dwelling units and 175,000 s.f. of commercial space,
- *Landmark Towers*--18 story mixed-use development of 375 dwelling units, 100,465 s.f. of retail space, and 36,530 s.f. of office space,
- *Campus at McCarthy Ranch (Carr America)*--Development of 450,000 s.f. of R&D/office space, and
- *Peery Arrillaga*--Addition of 32,000 s.f. of office space to this previously approved project.

[1]For the South County, the model also incorporates data from the Association of Monterey Bay Area Governments [AMBAG] model.

(c) Interim Roadway Network and Traffic Volumes. It is assumed in this analysis that the future near-term roadway network under interim conditions would be the same as the Background Conditions roadway network analyzed in Draft EIR chapter 14.

Interim peak hour traffic volumes were calculated by adding to project volumes the estimated traffic from the other four pending Milpitas developments listed above. The interim traffic volume results are diagrammed on Figure A-1.

(d) Interim Intersection Analysis. The level of service results for the signalized and unsignalized intersections under interim conditions are summarized in Table A-1. The results show that the following Milpitas intersections would operate at an unacceptable LOS measured against City and CMP LOS guidelines during at least one of the two peak hours of traffic:

- Milmont Drive and Dixon Landing Road--LOS E, AM peak hour,
- Warm Springs Boulevard-Milpitas Boulevard and Dixon Landing Road--LOS E, AM and PM peak hours,
- Milpitas Boulevard and Calaveras Boulevard--LOS F, AM peak hour,
- McCarthy Boulevard and Technology Drive-Bellew Drive--LOS F, PM peak hour,
- McCarthy Boulevard and Alder Drive--LOS F, PM peak hour,
- McCarthy Boulevard and Tasman Drive--LOS F, AM peak hour,
- Alder Drive and Tasman Drive--LOS F, PM peak hour,
- I-880 Southbound Ramps and Tasman Drive-Great Mall Parkway--LOS E, PM peak hour,

All other Milpitas intersections would operate at acceptable LOS. The LOS calculation sheets for this interim conditions analysis are included in the *McCarthy Ranch Mixed Use Project Draft EIR Transportation Analysis Appendix*, which is available for review at the City of Milpitas Engineering Division (Traffic Section).

Based on the City and CMP LOS guidelines identified in section 14.3.1 above, the Milpitas interim condition would cause ***adverse operational conditions***--i.e., LOS ratings below City and CMP acceptable guidelines--at the following seven additional intersections compared to the near-term Project Conditions:

- Warm Springs Boulevard/Milpitas Boulevard & Dixon Landing Road,
- McCarthy Boulevard & Technology Drive/Bellew Drive,
- McCarthy Boulevard & WB 237 Ramps,
- I-880 SB Ramps & Tasman Drive/Great Mall Parkway,
- North First Street & Montague Expressway,

Figure A-1
INTERIM MILPITAS TRAFFIC VOLUMES

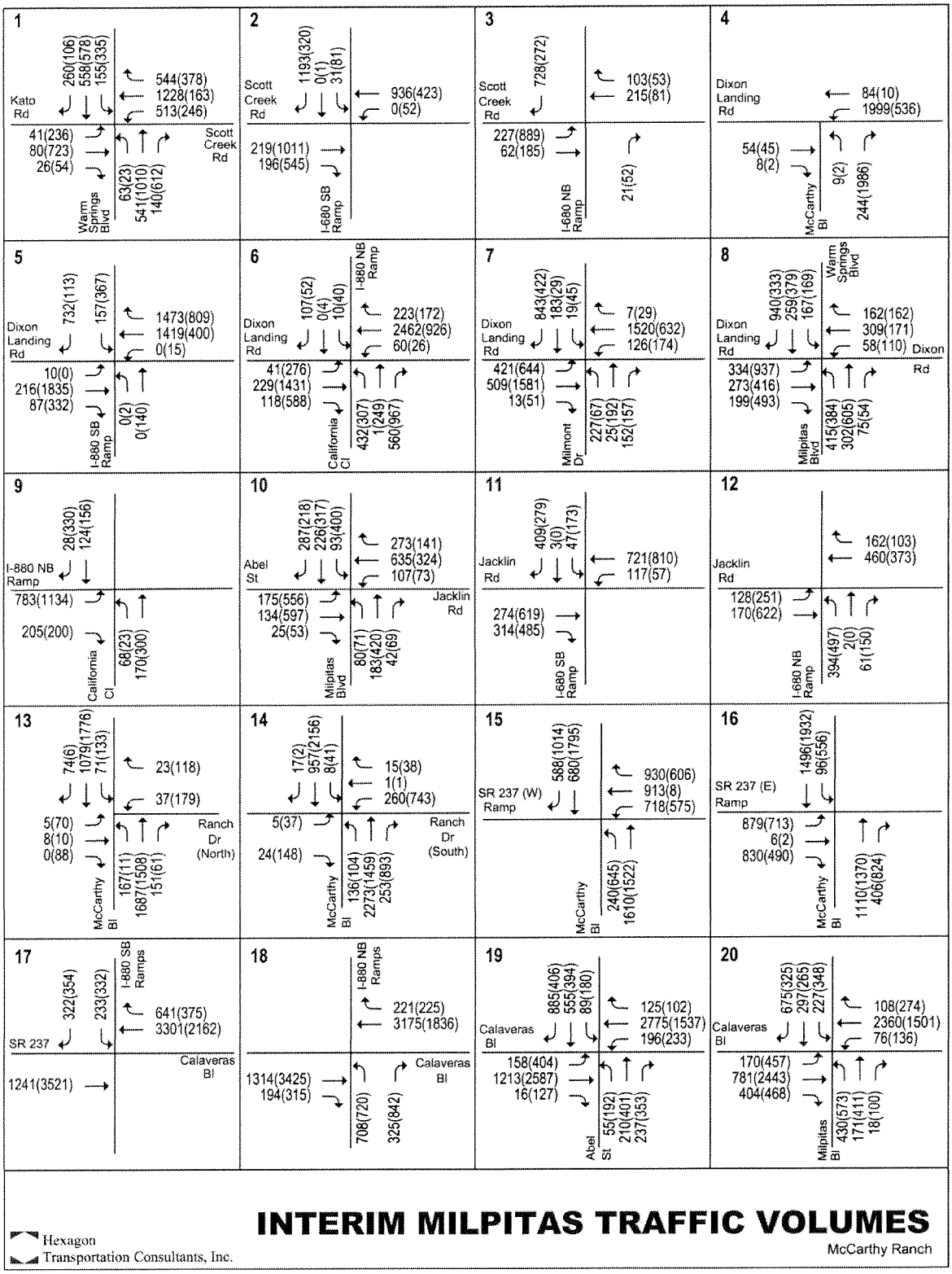


Table A-1
INTERSECTION LEVELS OF SERVICE UNDER INTERIM MILPITAS CONDITIONS

	Peak Hour	Background Avg. Delay	Background LOS	Interm Cumulative Avg. Delay	Interm Cumulative LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1. Warm Springs Blvd & Kato Rd/Scott Creek Rd /a/	AM	29.1	C	29.1	C	-1.5	0.00
	PM	36.6	D	37.2	D	1.4	0.05
2. SB 680 Ramps & Scott Creek Rd (unsignalized)	AM	0.6	A	0.6	A	0.0	0.00
	PM	2.9	A	2.9	A	0.0	0.00
3. NB 680 Ramps & Scott Creek Rd (unsignalized)	AM	3.5	A	3.7	A	0.2	0.00
	PM	7.0	A	8.1	A	1.2	0.00
4. McCarthy Blvd & Dixon Landing Rd	AM	7.8	A	15.4	B	9.5	0.39
	PM	8.5	A	30.3	C	49.4	0.49
5. SB 880 Ramps & Dixon Landing Rd /a/	AM	10.1	B	13.5	B	4.4	0.36
	PM	14.6	B	12.6	B	-1.7	0.15
6. NB 880 Ramps/California Cir & Dixon Landing Rd	AM	17.3	B	24.2	C	11.5	0.22
	PM	21.8	C	33.9	C	20.7	0.35
7. Milmont Drive & Dixon Landing Rd	AM	45.0	D	**58.7**	**E**	18.6	0.11
	PM	26.8	C	28.9	C	3.3	0.10
8. Warm Springs Blvd/Milpitas Blvd & Dixon Landing Rd	AM	37.1	D	**61.1**	**E**	37.6	0.21
	PM	45.7	D	**63.1**	**E**	34.4	0.16
9. California Cir & NB 880 Ramps /a/	AM	12.1	B	11.7	B	-0.7	0.10
	PM	14.6	B	17.3	B	4.0	0.11
10. Milpitas Blvd & Abel St/Jacklin Rd	AM	23.6	C	23.7	C	0.4	0.01
	PM	29.2	C	30.7	C	1.9	0.06
11. SB 680 Ramps & Jacklin Rd	AM	18.2	B	18.1	B	0.2	0.01
	PM	14.6	B	14.6	B	0.5	0.03
12. NB 680 Ramps & Jacklin Rd	AM	16.6	B	16.7	B	0.1	0.03
	PM	17.8	B	17.9	B	0.0	0.01
13. McCarthy Blvd & Ranch Drive (North) /a/	AM	15.5	B	20.1	C	5.2	0.24
	PM	26.4	C	35.7	D	14.2	0.23
14. McCarthy Blvd & Ranch Drive (South)	AM	14.5	B	22.4	C	13.8	0.33
	PM	20.7	C	36.1	D	27.4	0.36
15. McCarthy Blvd & WB 237 Ramps	AM	17.1	B	41.6	D	81.3	0.32
	PM	24.2	C	**75.4**	**E**	114.0	0.35
16. McCarthy Blvd & EB 237 Ramps /a/	AM	17.3	B	28.0	C	22.1	0.26
	AM	15.3	B	32.9	C	51.3	0.38
17. SB 880 Ramps & SR 237	AM	11.3	B	13.0	B	2.8	0.13
	PM	8.6	A	14.6	B	9.4	0.18
18. NB 880 Ramps & Calaveras Blvd	AM	17.0	B	23.4	C	7.7	0.13
	PM	21.3	C	27.0	C	8.5	0.07

* Denotes CMP intersection

/a/ Average delay decreases under "With Project" Conditions because of the addition of project trips to non-critical movements.

- Denotes I

Bold Font indicates unacceptable conditions.

Table A-1 (continued)
INTERSECTION LEVELS OF SERVICE UNDER INTERIM MILPITAS CONDITIONS

	Peak Hour	Background Avg. Delay	Background LOS	Interm Cumulative Avg. Delay	Interm Cumulative LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
19. Abel St & Calaveras Blvd*	AM	65.5	E	77.3	E	18.8	0.05
	PM	64.0	E	73.2	E	14.5	0.06
20. Milpitas Blvd & Calaveras Blvd*	AM	**81.9**	**F**	**99.6**	**F**	27.8	0.07
	PM	57.1	E	67.0	E	19.2	0.07
21. McCarthy Blvd & Technology Dr/Bellew Dr	AM	26.5	C	44.0	D	37.1	0.09
	PM	40.3	D	87.2	F	76.4	0.37
22. McCarthy Blvd & Sumac Dr (unsignalized)	AM	2.3	A	4.1	A	1.7	0.00
	PM	9.0	A	46.3	E	37.4	0.00
23. McCarthy Blvd & Alder Dr	AM	31.4	C	52.1	D	29.4	0.19
	PM	**57.2**	**E**	**156.8**	**F**	150.0	0.42
24. McCarthy Blvd & Murphy Ranch Rd (unsignalized) /	AM	2.4	A	2.2	A	-0.2	0.00
	PM	2.5	A	2.5	A	0.0	0.00
25. McCarthy Blvd & Tasman Dr	AM	**79.2**	**E**	**91.2**	**F**	19.3	0.05
	PM	43.9	D	45.8	D	2.4	0.07
26. Alder Dr & Tasman Dr	AM	17.2	B	26.8	C	31.1	0.24
	PM	**87.3**	**F**	**188.2**	**F**	126.2	0.30
27. SB 880 Ramps & Tasman Dr/Great Mall Pkwy	AM	23.8	C	26.2	C	3.1	0.10
	PM	36.3	D	67.6	E	99.9	0.27
28. NB 880 Ramps & Great Mall Pkwy	AM	31.1	C	35.2	D	5.0	0.08
	PM	36.1	D	38.6	D	1.9	0.05
29. N 1st St & Tasman Dr /a/	AM	32.5	C	32.6	C	0.2	0.01
	PM	38.1	D	38.0	D	0.3	0.02
30. Zanker Rd & Tasman Dr	AM	35.7	D	36.6	D	1.5	0.03
	PM	34.6	C	34.6	C	0.0	0.02
31. N 1st St & Montague Expwy*	AM	56.0	E	56.1	E	0.4	0.01
	PM	**127.2**	**F**	**132.8**	**F**	6.4	0.02
32. Zanker Rd & Montague Expwy*	AM	44.7	D	44.9	D	0.4	0.01
	PM	116.9	F	115.7	F	0.3	0.02
33. Montague Expwy & River Oaks Pkwy /a/	AM	46.0	D	45.6	D	-0.3	0.01
	PM	41.6	D	41.0	D	-0.5	0.02
34. Trimble Rd & Montague Expwy*	AM	26.4	C	27.5	C	1.2	0.02
	PM	**104.9**	**F**	**108.9**	**F**	6.3	0.03
35. McCarthy Blvd/O'Toole Av & Montague Expwy*	AM	53.1	D	64.2	E	16.1	0.07
	PM	**111.7**	**F**	**135.1**	**F**	15.6	0.03

* Denotes CMP intersection

/a/ Average delay decreases under "With Project" Conditions because of the addition of project trips to non-critical movements.

[ ] - Denotes Impact

Bold Font indicates unacceptable conditions.

- Trimble Rd & Montague Expressway, and
- McCarthy Boulevard/O'Toole Avenue & Montague Expressway.

The Milpitas interim scenario would not significantly increase delay at the other intersections that already operate at unacceptable levels under Background Conditions.

Adverse Condition A-1: Milmont Drive/Dixon Landing Road Intersection. Under Background Conditions, the intersection of Milmont Drive and Dixon Landing Road would operate at LOS D (45.0 seconds of delay) during the AM Peak-hour. Under the Milpitas interim scenario, this intersection would operate at LOS E (58.7 seconds of delay). According to City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-1. Implement the same improvement as proposed under Mitigation 14-1 from Draft EIR chapter 14 (reconfigure northbound Milmont Drive to one left turn lane, one shared through left lane, and one right turn lane). This improvement would cause the intersection to operate at LOS D (49.1 seconds of delay) during the AM peak hour.

Adverse Condition A-2: Warm Springs Boulevard-Milpitas Boulevard/ Dixon Landing Road Intersection. Under Background Conditions, the intersection of Warm Springs Blvd./Milpitas Blvd. - Dixon Landing Road would operate at LOS D (37.1 seconds of delay) during the AM Peak-hour and at LOS D (45.7 seconds of delay) during the PM peak-hour. Under the Milpitas interim scenario, this intersection would operate at LOS E (61.1 seconds of delay) and a LOS E (63.1 second of delay). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-2. The City of Milpitas has conducted a plan line study to improve the operations at this intersection. The plan line study includes providing an exclusive southbound right turn lane and two eastbound left turn lanes. These intersection improvements combined with split-phase signal operation on all four approaches of the intersection would improve the traffic operations at this intersection to a LOS D in the both the AM and PM peak-hours.

Adverse Condition A-3: McCarthy Boulevard/Westbound 237 Ramps Intersection. Under Background Conditions, the McCarthy Boulevard/Westbound 237 Ramps intersection would operate at LOS C (24.2 seconds of delay) during the PM Peak-hour. Under the Milpitas interim scenario, this intersection would operate at LOS E (75.4 seconds of delay). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-3. The inner through lane on the westbound approach could be restriped to a shared through/right turn lane. Restriping of the westbound approach would result is a LOS B operation during the AM peak and a LOS D during the PM peak-hour. Since this improvement involves modifications to a freeway ramp intersection, Caltrans would be involved in considering this improvement.

Adverse Condition A-4: Milpitas Boulevard/Calaveras Boulevard Intersection. The intersection of Milpitas Boulevard and Calaveras Boulevard would operate at LOS F (81.9 seconds of delay) under Background Conditions during the AM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (99.6 seconds of delay) with significant increases in critical-movement delay (27.8 seconds) and demand-to-capacity ratio (V/C). According to the CMP guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-4. Implement the improvement from Mitigation 14-2 from Draft EIR chapter 14 (provide a third westbound through lane). This improvement would allow the intersection to operate at LOS E (55.7 seconds of delay) during the AM peak hour.

Adverse Condition A-5: McCarthy Boulevard/Technology Drive-Bellew Drive Intersection. The intersection of McCarthy Boulevard/Technology Drive-Bellew Drive would operate at LOS D (40.3 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (87.2 seconds of delay) with significant increases in critical-movement delay (76.4 seconds) and volume-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-5. Restriping of the eastbound approach (one left-turn, one through, and one right-turn lane) to provide two left-turn lanes and one shared through/ right-turn lane would improve operations, but the LOS would still be considered unacceptable based on the City's standard during the PM peak hour. The widening of McCarthy Boulevard to three lanes in both directions, in conjunction with the restriping of the eastbound approach, would improve intersection operations to acceptable levels of service D during the PM peak hour; however, this improvement would require right-of-way acquisition, relocation of existing utility poles, and removal of existing landscaping.

Adverse Condition A-6: McCarthy Boulevard/Alder Drive Intersection. The intersection of McCarthy Boulevard/Alder Drive would operate at LOS E (57.2 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (156.8 seconds of delay) with significant increases in critical-movement delay (150.0 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-6. No mitigation has yet been formulated.

Adverse Condition A-7: McCarthy Boulevard/Tasman Drive Intersection. The intersection of McCarthy Boulevard/Tasman Drive would operate at LOS E (79.2 seconds of delay) under Background Conditions during the AM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (91.2 seconds of delay) with significant increases in critical-movement delay (19.3 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-7. Implement the improvement listed under Mitigation 14-4 from Draft EIR chapter 14 (convert the southbound shared through-right turn lane into a dedicated right turn lane). This improvement would allow the intersection to operate at LOS D (52.4 seconds of delay) during the AM peak hour.

Adverse Condition A-8: Alder Drive/Tasman Drive Intersection. The intersection of Alder Drive and Tasman Drive would operate at LOS F (87.3 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (188.2 seconds of delay) with significant increases in critical-movement delay (126.2 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-8. No mitigation has yet been formulated.

Adverse Condition A-9: SB 880 Ramps/Tasman Drive-Great Mall Parkway Intersection. The intersection of the SB 880 Ramps and Tasman Drive-Great Mall Parkway would operate at LOS D (36.3 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, this intersection would operate at LOS F (67.6 seconds of delay) with significant increases in critical-movement delay (99.9 seconds) and demand-to-capacity ratio (V/C). According to the City of Milpitas guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-9. The poor traffic operations at this intersection during the PM peak-hour would primarily be caused by the very high eastbound-to-southbound right turn movements. Under the Milpitas interim scenario, the projected volume for this movement would exceed 1,250 vehicles per hour on only one traffic lane. The addition of a free right-turn movement from eastbound Tasman Drive to the southbound I-880 on-ramp would mitigate the impact. The overpass would require widening to accommodate the channelized eastbound right-turn movement and the elevated on-ramp would require widening to accommodate the receiving vehicles from the eastbound approach.

Adverse Condition A-10: North First Street/Montague Expressway Intersection. The intersection of North First Street and Montague Expressway would operate at LOS

F (127.2 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (132.8 seconds of delay) with significant increases in critical-movement delay (6.4 seconds) and demand-to-capacity ratio (V/C). According to the CMP guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-10. No mitigation has yet been formulated that would not adversely impact light rail operations along North First Street.

Adverse Condition A-11: Trimble Road and Montague Expressway. The intersection of Trimble Road and Montague Expressway would operate at LOS F (104.9 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (108.9 seconds of delay) with significant increases in critical-movement delay (6.3 seconds) and demand-to-capacity ratio (V/C). According to the CMP guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-11. The intersection of Trimble Road with Montague Expressway serves as a major access point into and out of North San Jose. It currently experiences large vehicle queues for the westbound Montague Expressway to southbound Trimble Road movement. The movement is currently served by three left-turn lanes. The County improvement plans identify the construction of a flyover to serve the westbound-to-southbound movement. Construction of this flyover would improve the traffic operations at this intersection to a LOS D during the PM peak-hour under interim cumulative conditions.

Adverse Condition A-12: McCarthy Boulevard-O'Toole Avenue/ Montague Expressway Intersection. The intersection of McCarthy Boulevard-O'Toole Avenue and Montague Expressway would operate at LOS F (111.7 seconds of delay) under Background Conditions during the PM peak hour. Under the Milpitas interim scenario, it would operate at LOS F (135.1 seconds of delay) with significant increases in critical-movement delay (15.6 seconds) and demand-to-capacity ratio (V/C). According to the CMP guidelines, this would constitute a significant adverse LOS effect.

Improvement Need A-12. County improvement plans identify the construction of a "square-loop" interchange to replace the at-grade intersection as a Tier 1-B improvement. The interchange will eliminate the conflicting movements at the intersection and allow for uninterrupted flow along Montague Expressway to I-880. While specific designs have not been completed yet, it is assumed that the improvements will improve the level of service at the new facilities to a LOS E or better under Interim Cumulative Conditions.

APPENDIX 20.3

WATER SUPPLY ASSESSMENT FOR THE PROPOSED McCARTHY RANCH MIXED USE PROJECT

McCARTHY RANCH MIXED-USE PROJECT

Water Supply Assessment

(for compliance with SB 610 of 2001)

Approved
October 21, 2008
Milpitas City Council

McCARTHY RANCH MIXED-USE PROJECT
WATER SUPPLY ASSESSMENT

Summary

The City of Milpitas (City) completed this Water Supply Assessment (WSA) in compliance with California Senate Bill 610 (SB 610), which requires a WSA to be included in any environmental documentation for projects subject to the California Environmental Quality Act (CEQA). The WSA was completed using the City's 2005 Urban Water Management Plan (UWMP), the Santa Clara Valley Water District (SCVWD) 2005 UWMP and the City's 2002 Water Master Plan. The finding is that sufficient water supply is available for the proposed development.

Introduction

The McCarthy Ranch Mixed-Use project ("Project"), proposed by McCarthy Ranch, consists of approximately 1,070,000 square feet of office park floor space and 93,000 square feet of shopping center floor space on approximately 58.5 acres. The project site is located between Ranch Drive and Dixon Landing Road, on the west side of McCarthy Boulevard and includes Assessor Parcel Numbers 22-29-036, 22-30-037, 22-30-039 and 22-30-048.

The WSA shall include:

1. ***Identification and documentation of water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Project.***
2. ***A discussion with regard to whether the public water system's total projected water supplies available during normal, single-dry and multiple-dry water years during a 20-year projection will meet the projected water demand associated with the Project, in addition to the public water system's existing and planned future uses.***

As lead agency and water service supplier for the Project, the City prepared this WSA in compliance with SB 610 and CEQA. The findings of the WSA shall be submitted to City Council for approval and included in the environmental review process.

The City's most current UWMP, adopted in 2005, did not exactly account for water use associated with the Project as the parcels in question were anticipated to have an industrial park use. One of the parcels (22-30-048) is proposed to have its zoning changed to commercial, while the remaining parcels will continue to be zoned for industrial park. The Project would result in a net increase of 0.011 million gallons per day (mgd). The increase in water demand was based upon the acreage of the proposed zone change multiplied by water use factors identified in the City's 2002 Water Master Plan. Unaccounted water was also factored in at 6.1% of the calculated increase.

Water Supply Assessment

This section includes an evaluation of the City's ability to provide water for the Project. In accordance with SB 610, the WSA consists of the following:

(1) Water Supplies
   a. Wholesale Sources,
   b. Wholesale Supplies;
(2) Demand Analysis
   a. City's UWMP Projected Demand,
   b. Project Demand,
   c. Net Increase due to Project;
(3) Supply and Demand Comparison under Normal, Single-Dry, and Multiple-Dry Year Conditions; and
(4) Determination of Sufficient or Insufficient Water Supply.

1. WATER SUPPLIES

Wholesale Sources: The City purchases potable water from two wholesalers: the San Francisco Public Utilities Commission (SFPUC) and SCVWD. About 65% of the City's potable water is from SFPUC; the remaining is from SCVWD. The City also purchases recycled water through the South Bay Water Recycling Program for irrigation and other appropriate uses.

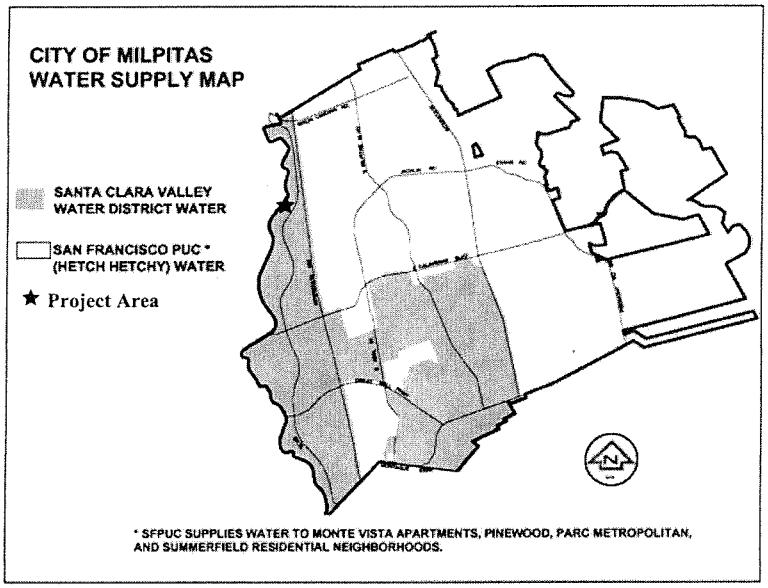
Guaranteed annual supply is established by contractual agreements between the City and the water wholesalers. SFPUC and SCVWD are expected to supply all potable water over the next 30 years, with no new water sources added. However, two wells (Pinewood Well and future Curtis well) will be available for emergency and supplemental purposes as necessary.

Table 1 -- Wholesale Supply Sources

Supply Source	Entitlement	Right	Contract	Ever Used	Will Supply Project
SCVWD			Yes	Yes	Yes
SFPUC			Yes	Yes	No
Recycled Water			Yes	Yes	Yes (irrigation, dual plumbing and cooling towers)
Wells		Yes		Yes	No

As shown in Figure 1, the City distributes SFPUC water to areas south of Calaveras Blvd. and east of I-680, as well as areas north of Calaveras Blvd. and east of I-880. The City distributes SCVWD water to all areas west of I-880 and areas south of Calaveras Blvd. and west of I-680, excluding the Monte Vista Apartments, Pinewood, Parc Metropolitan and Summerfield residential neighborhoods. These two sources are not blended under normal operating conditions; however, they can be physically interconnected to provide emergency water supply if necessary.

Figure 1 -- Water Source Map



The Project is located west of I-880, within the SCVWD service area. Therefore, this evaluation will assess project impacts related to water supply and demand within the SCVWD service area only.

Wholesale Supplies: The City began receiving SCVWD water in August 1993. SCVWD's water supply system consists of both treatment and distribution facilities that include imported supply facilities, raw water conveyance facilities, treatment plants, local reservoirs, treated water transmission lines and the groundwater basin.

SCVWD's water supply comes from a variety of sources, including local surface water and groundwater aquifers, as well as imported water from the Sierra Nevada through pumping stations in the Sacramento-San Joaquin River Delta. SCVWD treats both surface and imported water and sells treated water to its retailers. In addition, both local surface and imported water are recharged to the groundwater sub-basins, which SCVWD manages to the benefit of agricultural users and other independent users, as well as water retailers that pump groundwater.

Local runoff is captured in local SCVWD reservoirs, whose total storage capacity is about 170,000 acre feet (ac-ft). Water is then diverted for either recharge into the groundwater basin or treatment at one of SCVWD's three water treatment plants: Santa Teresa, Rinconada and Penitencia. Water is provided to the City's SCVWD turnout via the Milpitas Pipeline from Penitencia (and Santa Teresa as necessary).

Water purchased from SCVWD is governed by contract between SCVWD and the City. The actual contract amount is adjusted periodically based on an annual delivery schedule the City submits triennially. This schedule is binding for the subsequent three-year period. The City's annual request must be at least 95% of the maximum year in the current three-year schedule. The City's monthly "supply guarantee" is at least 15% of the total estimated yearly amount.

Table 2 shows historical purchases from SCVWD. The downward trend is attributed to conservation efforts, conversion from potable water irrigation to recycled water irrigation and economic factors.

Table 2 -- SCVWD Historical Water Purchases (mgd)

96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08
5.06	4.59	4.21	4.33	4.53	4.03	3.95	3.91	3.53	3.65	3.61	3.67

City's UWMP Projected Supply: The City's UWMP evaluated current and future water supply and demand in accordance with Section 10631 of the California Water Code. Table 3 lists water supplies the City can reasonably expect to receive under "Normal Year" conditions:

Table 3 – Quantity of Water Received in Normal Year (mgd)
Actual and Projected [(a)]

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

[(a)] Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

2. DEMAND ANALYSIS

City's UWMP Projected Demand: A variety of demographic factors may affect water use. Section 2.4 of the City's UWMP lists planning assumptions used to project future water demands. Table 4 provides the actual and projected water demands under normal conditions. Water demand includes an average unaccounted for water loss of 6.1%.

Table 4 – Normal Year Water Demand (mgd)
Actual and Projected [(a)]

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.37	6.63	6.88	7.13

[(a)] Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

The City's UWMP assumed land use within the project area would remain consistent with the buildout scenario of the 2002 Water Master Plan, in which the assumption was made that the project area would remain industrial park zoning. Water demand assigned to the project area is calculated in Table 5.

Table 5 – Project Area Water Demand
UWMP Demand Calculations [(a)]

Assessor Parcel Number	Parcel Size (acre)	Water Use Factor (gpd/acre)	Water Demand (gpd)
22-29-036	35.01	1,250	43,763
22-30-037	9.19	1,250	11,487
22-30-039	5.00	1,250	6,250
22-30-048	9.34	1,250	11,675
Total			**73,175**

[a)] City of Milpitas 2002 Water Master Plan Table 3-1

Project Demand: Projected water demands for the Project are shown in Table 6. As indicated in Table 7, the Project will result in a 10,741 gpd net increase in water demand (12.0 ac-ft per year). ***Adjusting for an additional 6.1% demand due to unaccounted water, the Project will require an additional supply of 11,396 gpd (12.8 ac-ft per year).***

Table 6 -- Project Water Demand

Assessor Parcel Number	Parcel Size (acre)	Water Use Factor (gpd/acre)	Water Demand (gpd)[a]
22-29-036	35.01	1,250	43,763
22-30-037	9.19	1,250	11,487
22-30-039	5.00	1,250	6,250
22-30-048	*9.34*	*2,400*	*22,416*
Total			**83,916**

[a] Calculated based on water use factors from Table 3-1 in the 2002 Water Master Plan.

Table 7 -- Project Impact on Water Demand

	Water Demand
Project Demand	83,916 gpd
- 2005 UWMP projected demand	- 73,175 gpd
Net Increase over 2005 UWMP	**10,741 gpd**

Table 8 -- Project Impact on Water Supply

	Water Demand
Project Net Increase in Demand	10,741 gpd
6.1 % Unaccounted Water	+ 655 gpd
Net Increase over 2005 UWMP	**11,396 gpd**

Demand = 11,396 gpd * 365 days/year * 1 ft^3/7.48 gal * 1 ac-ft/43,560 ft^3 = **12.8 ac-ft/year**

Currently, there is no definitive timeframe for the Project. However, the City expects the Project to move forward in the next few years. For the sake of this WSA, the City will assume Project completion by 2015. The 0.011 mgd increase in water demand will apply to Fiscal Year 2014-15 and beyond. Revised water demand projections (including projected demand) are shown in Table 9.

Table 9 – Projected Water Demand (mgd)
(2005 UWMP plus Project Demand)[a]

Water Supply	94/95	99/00	04/05	09/10	14/15	19/20	24/25	29/30
SCVWD	3.98	4.33	3.53	5.78	6.38	6.64	6.89	7.14

[a] Source: City of Milpitas 2005 Urban Water Management Plan Table 3-1.

To reduce potable water demand, the Project will incorporate water conservation practices to the maximum extent practicable in accordance with City policies and utilize recycled water to the maximum extent practicable. Recycled water will be required for landscape irrigation and toilet/urinal flushing. In addition, recycled water will be required for cooling towers (if used), unless determined infeasible by the City.

3. SUPPLY AND DEMAND COMPARISON UNDER NORMAL, SINGLE-DRY AND MULTIPLE-DRY YEAR CONDITIONS

Supply Reliability: To maintain water supply reliability and flexibility, multiple sources comprise SCVWD's water supply, including local groundwater, imported water, local surface water and recycled water. SCVWD has an active conjunctive water management program to optimize the use of groundwater and surface water, and to prevent groundwater overdraft and land subsidence.

As part of their Integrated Water Resources Planning Study (IWRP) and UWMP, SCVWD performed planning and modeling analysis, which indicated that future countywide demands can reliably be met if additional investments are made. SCVWD intends to ensure that these additional investments be undertaken in accordance with the IWRP framework, which recommends a flexible resource mix be implemented in phases over the planning horizon. This flexibility allows SCVWD to respond to changing and uncertain future conditions.

The net increase in demand of 12.8 ac-ft per year associated with the proposed development was not included in the analysis performed for SCVWD's UWMP. This and other incremental increases in demand, when aggregated, have the potential to change the composition and timing of required future investments. Further analysis, within the structure of SCVWD's long-term planning framework, is required to better define the specific projects and project timing in order for SCVWD to meet demands in the future. In addition, provisions of water supply to meet new growth are based upon assumptions (listed in SCVWD's UWMP) and funding for many long-term water supply projects and infrastructure projects has not been secured. However, as the primary water wholesaler in Santa Clara County, SCVWD has a commitment to ensure that the water supply is reliable to meet future demands, consistent with the County's and cities' General Plans and other appropriate regional and statewide projections.

Per Figures 6-2 through 6-4 and Tables 6-2 through 6-4 (pages 125-128) of SCVWD's UWMP, SCVWD's supply is anticipated to meet future countywide demands during normal, single-dry and multiple-dry water years. Although this analysis presents projections of future water supply, ongoing coordination with SCVWD will be necessary to ensure projections are consistent with SCVWD's long-term water management strategies. The City will continue to work with SCVWD to refine future water supply projections and ensure that long-term planning efforts are consistent. Tables 10 through 12 compare water supply and demand under normal year, single-dry year and multiple-dry year conditions.

Table 10 -- Projected Normal Water Year SCVWD Service Area Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Year 04/05 (3.53 mgd)	Difference Supply – Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	164	0	0	0
14/15	6.37	100	6.38	181	-0.01	0.16	0.16
19/20	6.63	100	6.64	188	-0.01	0.15	0.15
24/25	6.88	100	6.89	195	-0.01	0.15	0.15
29/30	7.13	100	7.14	202	-0.01	0.14	0.14

Table 11 -- Projected Single-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply - Demand (mgd)	Difference as % of Supply	Difference as % of Demand
09/10	5.78	100	5.78	100	0	0	0
14/15	6.37	100	6.38	100	-0.01	0.16	0.16
19/20	6.63	100	6.64	100	-0.01	0.15	0.15
24/25	6.88	100	6.89	100	-0.01	0.15	0.15
29/30	7.13	100	7.14	100	-0.01	0.14	0.14

Table 12 -- Projected Multiple-Dry Water Year SCVWD Supply and Demand Comparison

Fiscal Year	Supply (mgd)	% of Projected Normal Year	Demand (mgd)	% of Projected Normal Year	Difference Supply - Demand (mgd)	Difference as % of Supply	Difference as % of Demand
05/06	3.98	100	3.98	100	0	0	0
06/07	4.43	100	4.43	100	0	0	0
07/08	4.88	100	4.88	100	0	0	0
08/09	5.33	100	5.33	100	0	0	0
09/10	5.78	100	5.78	100	0	0	0
10/11	5.90	100	5.90	100	0	0	0
11/12	6.01	100	6.01	100	0	0	0
12/13	6.12	100	6.12	100	0	0	0
13/14	6.24	100	6.24	100	0	0	0
14/15	6.37	100	6.38	100	-0.01	0.16	0.16
15/16	6.42	100	6.43	100	-0.01	0.16	0.16
16/17	6.47	100	6.48	100	-0.01	0.15	0.15
17/18	6.53	100	6.54	100	-0.01	0.15	0.15
18/19	6.58	100	6.59	100	-0.01	0.15	0.15
19/20	6.63	100	6.64	100	-0.01	0.15	0.15
20/21	6.68	100	6.69	100	-0.01	0.15	0.15
21/22	6.73	100	6.74	100	-0.01	0.15	0.15
22/23	6.79	100	6.80	100	-0.01	0.15	0.15
23/24	6.84	100	6.85	100	-0.01	0.15	0.15
24/25	6.88	100	6.89	100	-0.01	0.15	0.15
25/26	6.93	100	6.94	100	-0.01	0.14	0.14
26/27	6.98	100	6.99	100	-0.01	0.14	0.14
27/28	7.03	100	7.04	100	-0.01	0.14	0.14
28/29	7.08	100	7.09	100	-0.01	0.14	0.14
29/30	7.13	100	7.14	100	-0.01	0.14	0.14

4. DETERMINATION OF SUFFICIENT OR INSUFFICIENT WATER SUPPLY

SCVWD has a commitment to ensure that the water supply is reliable to meet future demands. The City recognizes that funding for long-term water supply projects and infrastructure projects must be secured in order to meet this commitment.

This evaluation is based on projections from SCVWD'S 2005 UWMP and the City's 2002 Water Master Plan and 2005 UWMP. Based upon evaluation results, the minor increase in water demand is within the range of error for the estimates and is not significant. The staff of the Utility Engineering Section of the City of Milpitas has determined that there is sufficient water supply to provide service to the Project. However, to reduce potable water demand, the Project will be required to incorporate water conservation practices to the maximum extent practicable in accordance with City policies.

APPENDIX 20.4:

CEQA STANDARDS FOR EIR ADEQUACY

According to section 15151 of the CEQA Guidelines, the "Standards for Adequacy" of an EIR are as follows:

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

APPENDIX 20.5:

CEQA DEFINITION OF "MITIGATION"

According to section 15370 of the CEQA EIR Guidelines, the term "mitigation" includes:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impacts by replacing or providing substitute resources or environments.

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