Draft Master
Environmental Impact Report

Morgan Hill
Downtown Specific Plan

State Clearinghouse #2008012025

CITY OF MORGAN HILL

July 2009

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SUMMARY

Introduction

Per CEQA Guidelines Section 15123, this EIR contains a brief summary of the proposed action and its consequences. This section includes a summary of the project description, significant project impacts and associated mitigation measures, and potential project alternatives. The project issues to be resolved, such as the mitigation of significant effects and the choice between the project and an alternative, are listed within this summary. The known views of local groups and areas of controversy regarding the project are identified following the alternatives discussion.

Project Description

The proposed 2008 Morgan Hill Downtown Specific Plan (Specific Plan) would amend the Morgan Hill General Plan and the City's Zoning Ordinance for the downtown area and modify relevant plans, policies, and design guidelines which guide and regulate development in the area. The Downtown Specific Plan, consistent with Government Code Section 65451, includes proposed changes to existing and planned land uses, circulation, parking, urban design guidelines, signage guidelines, infrastructure, and an implementation plan.

The proposed Specific Plan contains a number of strategies to invigorate the downtown. In addition, the Specific Plan incorporates requirements and standards to encourage additional commercial space and office space within the downtown. The Specific Plan also includes a Parking Strategy to increase, improve, and stabilize the supply of parking available to the public in the Specific Plan area.

The proposed Specific Plan includes the creation of *Central Business District* (CBD) zoning that generally would be applied to parcels within the Downtown Core of the Specific Plan, along Monterey Road and the blocks to the east. The Ground Floor Overlay (GFO) district would be modified on Third Street and on Monterey Road and uses restricted to retail shops, restaurant, entertainment uses, and service commercial businesses that support a continuity of display window visual interest, such as florists and dry cleaners. The Specific Plan would change the land use designations and zoning near Dunne Avenue and Fifth Street to allow increased residential density. The project would also redesignate the VTA/Caltrain parking lot on Butterfield Boulevard to *High Density Residential/Planned Development.* The Specific Plan would increase the maximum density on parcels designated *Mixed Use* and zoned *Central Commercial/Residential District* (CC-R) from 18 units per acre to 20 units per acre on properties located north, south and west of the Specific Plan boundary and apply this designation and zoning to two additional blocks outside the Specific Plan boundary.

The Specific Plan "Project" as proposed would retain the existing General Plan roadway network within the Specific Plan boundary. Streetscape improvements to Third Street, Depot Street, and other downtown streets (such as bulbouts, a mid-block plaza, and mid-block crossing) are also proposed to encourage pedestrian activity and reduce vehicular speeds. The Specific Plan encourages the use of pedestrian links to connect parking lots to Monterey Road, Third Street, larger developments such as the Sunsweet site on Block 4, and mid-block pedestrian connections between Third and Fourth Streets. The Specific Plan proposes to reduce the parking requirements for uses in the Specific Plan project area and allow the payment of in-lieu fees toward overall parking, streetscape improvements, and operation/maintenance of parking in the Downtown.

The proposed Specific Plan would also allow for a "Project Alternate" that would narrow Monterey Road from the existing four lanes to two vehicular lanes. Under the Project Alternate, Depot Street would remain open and grade separation of the railroad tracks from Dunne Avenue would not be implemented (or, as an option, Depot Street would be re-routed through the Community and Cultural Center parking lot to create an intersection with Church Street, and a future Dunne Avenue grade separation would remain in the General Plan). The possibility of narrowing Monterey Road through downtown is intended to create a more pedestrian-friendly atmosphere and/or increase parking supply.

Summary of Significant Impacts

The following information summarizes the significant effects of the proposed project and mitigation measures proposed to reduce these effects. Impacts that are less than significant are not described in this summary and can be found in the text of the EIR. A complete description of the project and of its impacts and proposed mitigation measures can be found in the text of the EIR, which follows this summary.

Significant Impact	Mitigation and Avoidance Measures
Transportation Impacts	
Impact TRANS-1: Under 2015 conditions, the proposed project would exacerbate LOS D intersection operations at Monterey Road/Main Avenue during the AM peak hour. **(Significant Impact)**	**MM TRANS-1.1:** Monterey Road/Main Avenue. The addition of 2015 project traffic volumes would exacerbate LOS D intersection operations during the AM peak hour. The mitigation required to reduce the impact from the proposed project to less than significant during the AM peak hour would be to provide for Main Avenue protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening of the westbound approach (i.e., a separate left, through, and right lane with an overlap phase). The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is

Significant Impact	Mitigation and Avoidance Measures
	significant and unavoidable. **(Significant Unavoidable Impact)**
Impact TRANS-1a: Under 2015 conditions, the project alternate would result in impacts to the intersection of Monterey Road/Main Avenue (LOS F during AM and LOS D- during PM peak hour). **(Significant Impact)**	**MM TRANS-1a.1:** Monterey Road/Main Avenue. The addition of 2015 traffic volumes on the project alternate roadway network would exacerbate LOS D intersection operations to LOS F and LOS D- during the AM and PM peak hours, respectively. The mitigation required to reduce the impact from the project alternate to less than significant during the AM and PM peak hours would be to provide for Main Avenue protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening of the westbound approach (i.e., a separate left, through, and right lane with an overlap phase). The southbound approach would need to be widened to include two southbound left-turn lanes, a through lane, and a right-turn lane. These improvements would not conflict with the narrowing of Monterey Road from four to two lanes. The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable. **(Significant Unavoidable Impact)**
Impact TRANS-2a: Under 2015 conditions, the project alternate would result in impacts to the intersection of Dunne Avenue/Monterey Road (LOS D during PM peak hour). **(Significant Impact)**	**MM TRANS-2a.1:** Monterey Road/Dunne Avenue. The addition of 2015 traffic volumes on the project alternate roadway network would degrade acceptable (LOS D+) operations to LOS D operations during the PM peak hour. The mitigation required to reduce the impact from the project alternate to a less than significant level during the PM peak hour would be to provide for Dunne Avenue an eastbound right-turn overlap phase and a southbound approach with a left-turn, through lane and shared through-right lane. This configuration would be inconsistent with

Significant Impact	Mitigation and Avoidance Measures
	narrowing Monterey Road from four to two lanes between Dunne Avenue to Fifth Street and would require modification of the narrowing proposed under the Project Alternate to retain four lanes on Monterey Road between Dunne Avenue and Fifth Street. During a future Monterey Road streetscape planning process, the City of Morgan Hill should explore feasibility and desirability of retaining additional lanes in the block of Monterey Road between Dunne Avenue and Fifth Street; however, with the current project alternate roadway network, the impact at this intersection is significant and unavoidable. **(Significant Unavoidable Impact)**
Impact TRANS-4: The proposed Specific Plan, under 2030 conditions, would degrade Monterey Road/Main Avenue intersection operations from LOS D to LOS E and LOS D- during the AM and PM peak hours, respectively. **(Significant Impact)**	**MM TRANS-4.1:** Monterey Road/Main Avenue. The addition of 2030 traffic volumes would degrade the Monterey Road and Main Avenue intersection operations from LOS D to LOS E and LOS D- during the AM and PM peak hours, respectively. To mitigate this impact, Main Avenue would need protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening of the westbound approach (i.e., separate left, through, and right lane with an overlap phase). The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable. **(Significant Unavoidable Impact)**
Impact TRANS-4a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Monterey Road	**MM TRANS-4a.1:** Monterey Road/Main Avenue. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the Monterey Road and Main Avenue intersection operations from LOS D to LOS F and LOS E during the AM and PM peak hours,

Significant Impact	Mitigation and Avoidance Measures
intersection operations from LOS D to LOS F and LOS E during the AM and PM peak hours, respectively. **(Significant Impact)**	respectively. To mitigate this impact, Main Avenue would need protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening the westbound approach (i.e., separate left, through, and right lane with an overlap phase). The southbound approach would also need to be widened (i.e. two southbound left-turn lanes, a through-lane, and a right-lane) and the northbound approach would require a northbound left-turn lane, a through-lane, and a shared through-right lane. The northbound approach would conflict with the potential narrowing of Monterey Road from four to two lanes between Main Avenue and Dunne Avenue. The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable. **(Significant Unavoidable Impact)**
Impact TRANS-5: The proposed Specific Plan, under 2030 conditions, would degrade Depot Street/Main Avenue intersection operations from LOS C to LOS E during the AM peak hour and would meet the peak hour signal warrant criteria. **(Significant Impact)**	**MM TRANS-5.1:** Depot Street/Main Avenue. The addition of 2030 traffic volumes would degrade the Depot Street/Main Avenue intersection operations from LOS C to LOS E during the AM peak hour and the peak-hour signal warrant would be met. Signalizing this intersection would mitigate this impact to a less than significant level. It should be noted that signalization at this location was recommended in the Circulation Element update that is currently in progress. The City of Morgan Hill will monitor traffic at this location and provide for installation of a signal or make other improvements at the time the intersection is projected to operate at an unacceptable level and meet signal warrants. **(Less Than Significant Impact with Mitigation)**

Significant Impact	Mitigation and Avoidance Measures
Impact TRANS-5a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/ Depot Street intersection operations from LOS C and D to LOS E and F during the AM and PM peak hours, respectively, and would meet the peak hour signal warrant criteria. **(Significant Impact)**	**MM TRANS-5a.1:** Main Avenue/Depot Street. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the Main Avenue and Depot Street intersection from LOS C and LOS E to an unacceptable LOS E and LOS F during the AM and PM peak hours, respectively. In addition, the peak hour warrant is exceeded during both peak hours. Providing a signal at this location would reduce this impact to a less than significant level and provide acceptable (LOS D+ or better) operations during both peak hours. It should be noted that the recommendation for a signal is also identified in the recommended roadway network for the General Plan Circulation Element update that is currently in progress. The City of Morgan Hill will monitor traffic at this location and provide for installation of a signal or make other improvements at the time the intersection is projected to operate at an unacceptable level and meet signal warrants. **(Less Than Significant Impact with Mitigation)**
Impact TRANS-6a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Hale Avenue intersection operations from LOS B to LOS E during the AM peak hour and would meet the peak hour signal warrant criteria. **(Significant Impact)**	**MM TRANS-6a.1:** Main Avenue/Hale Avenue. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the intersection of Main Avenue and Hale Avenue from LOS B to an unacceptable LOS E during the AM peak hour. In addition, the peak hour warrant is exceeded during the AM peak hour. Providing a signal at this location would reduce this impact to a less than significant level and provide acceptable (LOS D+ or better) operations during both peak hours. It should be noted that the recommendation for a signal is also identified in the recommended roadway network for the General Plan Circulation Element update that is currently in progress. The City of Morgan Hill will monitor traffic at this location and provide for installation of a signal or make other improvements at the time the intersection is projected to operate at an unacceptable level and meet signal warrants. **(Less Than Significant Impact with Mitigation)**
Impact TRANS-7a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Dunne Avenue/Monterey Road intersection operations from LOS D+ to LOS D during the PM peak hour. **(Significant Impact)**	**MM TRANS-7a.1:** Dunne Avenue/Monterey Road. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the intersection of Monterey Road and Dunne Avenue from an acceptable LOS D+ to an unacceptable LOS during the PM peak hour. The mitigation required to reduce the impact from the project alternate to a less than significant level during the PM peak hour would be to provide an eastbound right-turn overlap phase, and a southbound approach with a left-turn,

Significant Impact	Mitigation and Avoidance Measures
	through lane and shared through-right lane to operate acceptably (LOS D+ or better). This configuration would be inconsistent with narrowing Monterey Road from four to two lanes between Dunne Avenue to Fifth Street and would require modification of the narrowing proposed under the Project Alternate. During a future Monterey Road streetscape planning process, the City of Morgan Hill could explore feasibility and desirability of retaining additional lanes in the block of Monterey Road between Dunne Avenue to Fifth Street; however, with the current project alternate roadway network, the impact at this intersection is significant and unavoidable. **(Significant Unavoidable Impact)**
Impact TRANS-8a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Butterfield Boulevard intersection operations from LOS D+ to LOS D during the PM peak hour. **(Significant Impact)**	**MM TRANS-8a.1:** Main Avenue/Butterfield Boulevard. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the intersection of Main Avenue/Butterfield Boulevard from an acceptable LOS D+ to an unacceptable level of service LOS D during the PM peak hour. This intersection requires a second northbound left-turn to operate acceptably. However, this improvement may require right-of-way from the northwest and southeast corners of the intersection, and physical constraints exist along the east side of Butterfield Boulevard due to the open canal. Overall, the implementation of a second northbound left-turn lane is considered physically feasible and would mitigate this impact to a less than significant level. The City of Morgan Hill will monitor traffic at this location and make necessary improvements at the time the intersection is projected to operate at an unacceptable level. **(Less Than Significant Impact with Mitigation)**
Impact TRANS-10: While implementation of some or all of the parking strategies outlined in the Specific Plan would increase parking supply in the Downtown to meet parking demand as development in the Downtown Core intensifies, the City has no adopted program to monitor parking availability and undertake measures to provide adequate supply. **(Significant Impact)**	**MM TRANS-10.1:** The City shall create a land use and parking database for the downtown area and shall be required to document the demand for parking from retail and office development and changes in parking supply through the preparation of a monitoring report submitted to the City Council every two years to ensure planning, regulatory, and construction measures are undertaken to provide adequate parking supply. Implementation of this measure would reduce the impact of the Specific Plan development on parking supplies to a less than significant level. **(Less Than Significant Impact with Mitigation)**

Significant Impact	Mitigation and Avoidance Measures
Noise and Vibration Impacts	
Impact NV-1: Residential development proposed under the Downtown Specific Plan would be exposed to exterior noise levels exceeding 60 dBA L_{dn} from traffic noise and 70 dBA L_{dn} from railroad noise. Exterior noise levels exceeding the acceptable General Plan standards would result in significant impacts to outdoor spaces in new residential development in the Downtown. **(Significant Impact)**	**MM NV-1.1:** Residential development shall be setback from traffic and railroad noise sources to reduce ambient noise levels in outdoor use areas to the extent feasible. Noise-sensitive outdoor spaces shall be shielded with buildings or noise barriers wherever possible. Residential development proposed under the Specific Plan shall strive to reduce traffic noise levels to 60 dBA L_{dn} or less and railroad train noise levels to 70 dBA L_{dn} or less in outdoor use areas through a combination of setbacks, noise barriers, and building design/layout. The specific determination of what treatments are necessary would be conducted on a project-by-project basis. Implementation of these measures would reduce noise impacts to outdoor use areas to a less than significant level for many of the proposed downtown residential units, however, even with incorporation of these mitigation measures to the extent feasible, the outdoor spaces for some residential units will continue to be impacted and, therefore, this impact is significant and unavoidable. **(Significant Unavoidable Impact)**
Impact NV-2: Interior noise levels would be reduced through the incorporation of standard measures, however, L_{max} noise levels of up to 110 dBA from train warning whistles, would exceed the City's L_{max} noise standards. **(Significant Impact)**	**MM NV-2.1:** Project-specific acoustical analyses shall be submitted for all residential and mixed-use projects where exterior noise levels exceed 60 dBA L_{dn}. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required for new residential uses adjacent to the UPRR, Monterey Road, or Butterfield Boulevard. Special building construction techniques (e.g., sound-rated windows and building facade treatments) would be required to reduce maximum instantaneous noise levels (L_{max}) to 50 dBA in bedrooms and 55 dBA in other habitable rooms. These treatments include, but are not limited to, sound rated windows and doors, sound rated wall construction, acoustical caulking, insulation, acoustical vents, etc. Large windows and doors should be oriented away from the railroad where possible, and sensitive interior spaces should be located further from the railroad corridor. Projects shall also incorporate setbacks, as great as feasible, from the railroad corridor and construct noise barriers. The specific determination of what treatments are necessary would be conducted on a unit-by-unit basis. Results of the analysis, including the description of the necessary noise control treatments, would be submitted to the City along with the building plans and approved prior to issuance of a building permit. The City should also explore designation of the at-grade rail crossings as "quiet zones". Quiet zones could be

Significant Impact	Mitigation and Avoidance Measures
	established so that trains would not be required to sound their warning whistles but would require greater safety controls at the crossings. Wayside horn systems could be installed at the at-grade crossings to confine horn noise only in the immediate vicinity of the crossings. For some downtown residential properties incorporation of project-specific noise reduction treatments will reduce this impact to a less than significant level; however, for many units on properties adjoining the railroad the interior L_{max} noise standards may not be met even with incorporation of feasible and best available methods and, therefore, this impact would be significant and unavoidable. **(Significant Unavoidable Impact)**
Impact NV-3: Residential uses allowed under the Specific Plan within approximately 50 feet of the UPRR would be subject to vibration from railroad trains that would exceed the FTA impact guidelines. **(Significant Impact)**	**MM NV-3.1:** Residential structures shall be located at least 50 feet from the nearest railroad track unless project specific vibration analyses indicate that vibration levels at the building site and/or the design of the project result in vibration levels of 75 VdB or less. **(Less Than Significant Impact with Mitigation)**
Impact NV-4: Construction activities, even with incorporation of standard measures, could impact noise sensitive receptors in the project area for more than one year. **(Significant Impact)**	**MM NV-4.1:** The following mitigation measures shall be implemented, as conditions of approval, in addition to construction hour limitations in the Morgan Hill Municipal Code, to reduce potential construction related noise impacts to nearby sensitive receptors: • Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary noise generating equipment (e.g. rock crushers, compressors) as far as possible from adjacent residential receivers. • Acoustically shield stationary equipment located near residential receivers with temporary noise barriers or recycled demolition materials. • Utilize "quiet" air compressors and other stationery noise sources where technology exists. • The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance. • Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator would

Significant Impact	Mitigation and Avoidance Measures
	determine the cause of the noise complaint (e.g., bad muffler, etc.) and would require that reasonable measures be implemented to correct the problem. Implementation of the mitigation and standard measures identified above, would reduce noise generated by construction projects in the Specific Plan project area, however, given the duration of time (greater than one year) that sensitive receptors may be exposed to construction noise, this impact would remain significant and unavoidable. **(Significant Unavoidable Impact)**
Air Quality Impacts	
Impact AQ-2: Projected new development through 2015 and 2030 under the proposed project would result in an increase in regional air pollutant emissions of ROG and PM_{10} in excess of BAAQMD thresholds and, therefore, would result in significant impacts to regional air quality. **(Significant Impact)**	**MM AQ-2.1:** The Specific Plan shall be amended to require submission of an Air Quality and Transportation Demand Management (AQ-TDM) Plan as part of the Design Permit (Architectural and Site Review) application for review and approval by the Community Development Director. The AQ-TDM Plan will incorporate appropriate measures at appropriate locations as determined through the design permit process, such as the following, to reduce air quality impacts: • Provide bicycle lanes, sidewalks and/or paths, connecting project residences to adjacent schools, parks, the nearest transit stop and nearby commercial areas. • Provide secure and conveniently placed bicycle parking and storage facilities at parks and other facilities. • Allow only natural gas fireplaces. No wood burning devices would be allowed. • Construct transit amenities such as bus turnouts/bus bulbs, benches, shelters, etc. • Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development. • Provide showers and lockers for employees bicycling or walking to work. • Provide transit information kiosks and bicycle parking at commercial facilities. • Provide secure and conveniently located bicycle parking and storage for workers and patrons. **MM AQ-2.2:** Public parking lots constructed or assisted by the City or Redevelopment Agency of Morgan Hill and private residential parking facilities of 50 spaces or more shall include the following amenities:

Significant Impact	Mitigation and Avoidance Measures
	• Electric vehicle charging facilities. • Preferential parking for Low Emission Vehicles (LEVs). The above measures have the potential to reduce project-related regional emissions by five to ten percent. A reduction of this magnitude would not reduce emissions to below the BAAQMD significance threshold of 80 pounds per day for ROG and PM_{10}. Project regional air quality impacts, therefore, would remain significant and unavoidable. **(Significant Unavoidable Impact)**
Impact AQ-5: Demolition and construction activities due to redevelopment in the Specific Plan project area, even with incorporation of City of Morgan Hill standard measures, may generate construction-period exhaust and fugitive dust that would temporarily affect local air quality. **(Significant Impact)**	**MM AQ-5.1:** The Bay Area Air Quality Management District (BAAQMD) has prepared a list of feasible demolition and construction dust control measures to reduce construction impacts to a less than significant level. The following construction practices shall be incorporated into dust mitigation plans implemented during demolition and construction phases of proposed development in the Specific Plan project area to reduce dust and exhaust emissions: • Water active demolition areas to control dust generation during demolition of structures and break up of pavement. • Cover all trucks hauling demolition debris from the site. • Use dust proof chutes to load debris into trucks whenever feasible. • Water all active construction areas at least twice daily. • Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind. • Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard. • 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. • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads to 15 miles per

Significant Impact	Mitigation and Avoidance Measures
	hour. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. **AM AQ-5.1:** The following additional measures recommended by the BAAQMD to reduce engine exhaust emissions: • Use alternative fueled construction equipment, when feasible. • Minimize idling time (five minutes maximum). • Maintain properly tuned equipment. • Limit the hours of operation of heavy equipment and/or the amount of equipment in use. **(Less Than Significant Impact with Mitigation)**
Hazards and Hazardous Materials	
Impact HM-1: Soil and/or groundwater in the project area may be contaminated by hazardous materials that could be disturbed, exposed, or released due to development and redevelopment in the project area. **(Significant Impact)**	**MM HM-1.1:** A Phase I Environmental Site Assessment shall be required for all properties proposed for redevelopment with residential uses where previous uses include industrial, commercial or agricultural use. If warranted, a Phase II Environmental Site Assessment shall be prepared which identifies specific remediation measures required to ensure the site is suitable for residential development. **MM HM-1.2:** If remediation activities are required on any parcel within the Specific Plan project area, these activities shall be carried out in accordance with a Remediation Plan prepared to address the findings of the Phase II Environmental Site Assessment. The Remediation Plan shall specify the cleanup levels that will be applied and the anticipated regulatory agency responsible for oversight. Potential impacts associated with the remediation activities, such as air and health impacts associated with excavation activities, transportation impacts from removal or remedial activities, and risk of upset in the event of an accident at the site or during transport of contaminated soil shall also be addressed to ensure no significant impacts from implementation of the Remediation Plan. **MM HM-1.3:** The Central Coast Regional Water Quality Control Board (RWQCB) and County of Santa Clara Department of Environmental Health Local Oversight Program (LOP) are responsible for overseeing cleanup of contaminated soil and water and for overseeing development activities on contaminated sites. In

Significant Impact	Mitigation and Avoidance Measures
	accordance with the Fuel Leak Site Case Closure for Unocal #6169 (Case No. 14-668, SCVWDID No. 09S3E28C03f), the County, RWQCB, and the Community Development Department shall be notified prior to any changes in land use, grading activities, excavation, and installation of water wells on the Unocal 76 station parcel of Block 14. A Clearance Letter from either of these agencies outlining site history and any requirements for cleanup or handling of residual contamination shall be submitted to the Community Development Director prior to the issuance of a site development permit. **MM HM-1.4:** The Central Coast Regional Water Quality Control Board and County of Santa Clara Department of Environmental Health Local Oversight Program are responsible for overseeing cleanup of contaminated soil and water and for overseeing development activities on contaminated sites. Prior to the issuance of a site development permit on Block 20, a Clearance Letter from either of these agencies outlining site history and requirements for cleanup or handling of residual hydrocarbon contamination on the site shall be submitted to the Community Development Director. **(Less Than Significant with Mitigation)**
	Biological Resources
Impact BIO-1: Tree removal during the nesting season could impact protected tree-nesting raptors. Any loss of fertile bird eggs, or individual nesting birds, or any activities resulting in nest abandonment during construction, would constitute a significant impact. **(Significant Impact)**	**MM BIO-1.1:** Removal of trees in the Specific Plan area could be scheduled between September and December (inclusive) to avoid the raptor nesting season and no additional surveys would be required. **MM BIO-1.2:** If removal of the trees on-site would take place between January and August (inclusive), a pre-construction survey for nesting raptors shall be conducted by a qualified ornithologist to identify active nesting raptor nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys shall be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area for raptor nests. If an active raptor nest is found in or close enough to the construction area to be disturbed by these activities, the ornithologist shall, in consultation with the State of California, Department of Fish & Game (CDFG), designate a construction-free buffer zone (typically 250 feet) around

Significant Impact	Mitigation and Avoidance Measures
	the nest until the end of the nesting activity. The applicant shall submit a report indicating the result of the pre-construction survey and any designated buffer zones to the satisfaction of the Community Development Director. **(Less Than Significant Impact with Mitigation)**
Cumulative Impacts	
Impact C-TRANS-1: The proposed project, along with other pending General Plan amendments, would result in significant cumulative impacts to three signalized intersections and one unsignalized intersection. **(Significant Cumulative Impacts)**	**MM C-TRANS-1.1:** Monterey Road/Main Avenue. The combination of cumulative traffic from all of the proposed projects and from implementation of the Project Alternate to narrow Monterey Road to one lane in each direction would cause the intersection to operate at LOS F during the AM and PM peak hours. To mitigate this impact, Main Avenue would need protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening the westbound approach (i.e., separate left, through, and right lane with an overlap phase). The southbound approach of Monterey Road would also need to be widened (i.e. two southbound left-turn lanes, a through-lane, and a shared through-right lane) and the northbound approach would require a northbound left-turn lane, a through-lane, and a shared through-right lane. The northbound approach would conflict with the potential narrowing of Monterey Road from four to two lanes between Main Avenue and Dunne Avenue. The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable. **(Significant Unavoidable Cumulative Impact)** **MM C-TRANS-1.2:** Monterey Road/Dunne Avenue. The addition of cumulative traffic and the narrowing of Monterey Road would degrade the intersection operations

Significant Impact	Mitigation and Avoidance Measures
	from LOS D+ to LOS D during the PM peak hour. This intersection requires an eastbound right-turn overlap phase, and a southbound approach with a left-turn lane, through lane and shared through-right lane to operate acceptably (LOS D+ or better) and reduce the project's contribution to this cumulatively significant impact. These improvements (two southbound through lanes at this intersection) would conflict with narrowing of Monterey Road and the installation of traffic calming and pedestrian improvements evaluated as the project alternate. One of the City's goals for the proposed Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and traffic calming measures. This mitigation is not consistent with the priority of reducing vehicle speeds on Monterey Road and is not proposed by the project. During a future Monterey Road streetscape planning process, the City of Morgan Hill should explore the feasibility and desirability of incorporating this mitigation measure, to retain additional lanes in the block of Monterey Road, between Dunne Avenue and Fifth Street. **(Significant Unavoidable Cumulative Impact)** **MM C-TRANS-1.3:** Main Avenue and Butterfield Boulevard. The addition of cumulative traffic at this location would degrade the intersection operations from LOS C- and LOS D+ to LOS D during the AM and PM peak hours, respectively. This intersection requires a second northbound left-turn to operate acceptably. However, this improvement may require right-of-way from the northwest and southeast corners of the intersection, and physical constraints exist along the east side of Butterfield Boulevard due to the open canal. Overall, the implementation of a second northbound left-turn lane is considered physically feasible and would mitigate this impact to a less than significant level. The City of Morgan Hill will monitor this intersection and implement this measure at such time, based on monitoring of LOS and anticipated traffic from approved developments, that the intersection will degrade below an acceptable level of service. **(Less Than Significant Cumulative Impact with Mitigation)** **MM C-TRANS-1.4:** Dunne Avenue and Del Monte Street. The addition of cumulative traffic at this location would degrade intersection operations from LOS B to LOS E and LOS F during the AM and PM peak hours, respectively. The peak-hour traffic volumes at this

Significant Impact	Mitigation and Avoidance Measures
	intersection would meet the peak-hour signal warrant during the PM peak hour and installation of a traffic signal would mitigate the impact at this intersection and provide LOS C (20.6 seconds of average delay) and LOS C+ (20.8 seconds of average delay) operations during the AM and PM peak hour. The City of Morgan Hill will monitor this intersection and implement this measure at such time, based on monitoring of LOS and anticipated traffic from approved developments, that the intersection will degrade below an acceptable level of service. **(Less Than Significant Cumulative Impact with Mitigation)**

SUMMARY OF ALTERNATIVES

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

The range of alternatives selected for analysis is governed by the "rule of reason," which requires the EIR to discuss only those alternatives necessary to permit a reasoned choice. Although the alternatives do not have to meet every goal and objective set for the proposed project, they should "feasibly attain most of the basic objectives of the project."

CEQA does not require that all possible alternatives be evaluated, only that "a range of feasible alternatives" be discussed to encourage both meaningful public participation and informed decision making. In selecting alternatives to be evaluated, consideration may be given to their potential for reducing significant unavoidable impacts, reducing significant impacts that are mitigated by the project to less than significant levels, and further reducing less than significant impacts.

The significant impacts of the project include: transportation, noise and vibration, air quality (regional project impacts and construction), hazards and hazardous materials, biological resources (possible impacts to nesting birds), and cumulative transportation impacts. With the exception of transportation, noise, regional air quality, and cumulative impacts all of the identified impacts can be reduced to a less than significant level with mitigation measures included in the project. Alternatives required by CEQA to be considered should be capable of avoiding or reducing some or all of the significant impacts listed above.

Consideration of a "No Project" alternative is mandatory. Other logical alternatives include a reduced scale alternative and location alternatives. A modified land use alternative is included as a design alternative and is not intended to reduce any of the significant impacts of the project. Alternatives discussed in the EIR include:

1. No Project
2. Reduced Scale Alternative
3. Location Alternatives

4. Modified Land Use Alternative
5. Monterey Road Narrowing Design Alternative

No Project Alternative

The CEQA Guidelines stipulate that an EIR specifically include a "No Project" Alternative, which should discuss both "the existing conditions, as well as what will be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services."

Under a No Project Alternative, street improvements for pedestrians would be limited and Monterey Road through the downtown would remain in its current configuration. Downtown would continue to be redeveloped under existing land use designations (primarily Mixed Use) and zoning (primarily CC-R) and residential densities would be limited to 18 units per acre, except for the three opportunity sites identified in the existing Downtown Plan, which have already been rezoned to allow 25 to 40 units per acre. Redevelopment would be expected to occur on parcels with these designations. Increased retail uses, especially restaurants, entertainment uses, food stores, and other retail may be limited by the lower density residential uses anticipated under the No Project Alternative. The parking supply in the Downtown may not increase to the same extent through the construction of additional public lots.

The No Project Alternative may avoid or less certain significant transportation, regional air quality, and cumulative impacts of the project, however, the extent to which these impacts would be reduced is uncertain since the existing Downtown Plan and zoning would allow for a substantial amount of change and development in the Specific Plan project area. Other significant impacts such as noise and biological resources, would be reduced, but not completely avoided. The No Project Alternative is feasible from a land use and planning standpoint but would not meet most of the basic objectives of the project, as identified in Section 2 of this EIR.

Reduced Scale Alternative

The Reduced Scale Alternative would consist of a smaller increase in projected residential, retail, and office development Downtown, defined as a reduction of the project to 60 percent of the current development planned under the General Plan for the Downtown by 2015. It should be noted that this alternative would allow for less development than is currently allowed under the City's General Plan and existing Downtown Plan. This would be roughly equivalent to 258 more residential units, 27,000 square feet of retail uses, and 18,000 square feet of office space than under existing conditions. Some intensification and taller building heights would be allowed only along Monterey Road in a limited area zoned CBD. The remainder of the *Mixed Use* area in the Downtown would retain CC-R zoning and residential zoning designations would not change. Like the proposed project, pedestrian improvements would be included on Third Street. The provision of new parking spaces would be limited proportionally. This change in the intensity of development would reduce traffic generation and would avoid all the significant transportation impacts of the project to the Monterey Road/Main Avenue intersection in 2015 and 2030. In general, the Specific Plan project area, including Downtown, Block 19 and Block 20, would continue to be redeveloped under existing land use designations (primarily Mixed Use) and zoning (primarily CC-R).

The Reduced Scale Alternative would avoid the significant transportation and regional air quality impacts and lessen cumulative impacts of the project. Other significant impacts would be reduced, but not completely avoided. The Reduced Scale Alternative would require modifications to the

existing General Plan and zoning in the Downtown to reduce development potential. This alternative could require voters to change recently approved modifications to the RDCS program allowing 500 additional residential units in the Downtown. The very small amount of increased intensity allowed by the Reduced Scale Alternative would not meet the basic project objectives of increasing residential density within the Specific Plan project area to support Downtown businesses; creating a public investment plan with partial funding for downtown public infrastructure projects to encourage redevelopment in Downtown; create an active downtown through intensifying residential, retail, restaurant, and entertainment uses, within an urban setting improved with landscaping and streetscape improvements; or strengthen Downtown's identity and scale with new design related to a traditional character.

Location Alternatives

Location alternatives were considered for two vacant sites in Morgan Hill. A downtown could be created 1) on 93.3 acres southeast of US 101 between Cochrane Road and Half Road (Cochrane Road East), or 2) on 147.9 acres on the east side of US 101 on both sides of Tennant Avenue between Barrett Avenue and Fisher Avenue (Southeast Quadrant). The objectives include creating an active downtown that is pedestrian and retail friendly and various improvements to encourage residents to live, work, shop and dine in Downtown Morgan Hill. A mixed-use high density residential with retail and office development could be constructed on either of these sites under this alternative.

The Location Alternative sites would be subject to greater roadway noise impacts than the proposed Specific Plan project area. Maximum instantaneous noise and vibration impacts would be reduced due to the lack of railroad tracks near these sites. The Location Alternative sites would also result in greater land use impacts due to blight that would be expected to occur in the existing downtown area and agricultural impacts from the loss of agricultural lands on both alternative sites. Development of the Location Alternative sites would also result in greater air quality impacts and contributions to global climate change due to increased VMT. Development on the Southeast Quadrant site would require annexation of the site into the City of Morgan Hill.

Modified Land Use Alternative

Under this alternative the proposed land use on Block 16 would be modified to allow for greater flexibility of the future uses on this block. This alternative is not being considered due to its potential to reduce the significant impacts of the project but rather as a design alternative to provide for a different combination of uses to be allowed on Block 16 than would be allowed under the currently proposed General Plan land use designation and zoning district. The Modified Land Use Alternative would designate the 6.2-acre Block 16 for Mixed Use and CBD zoning. This Modified Land Use Alternative would allow for the site to be developed consistent with the objective of intensifying development and providing a mix of complementary uses, such as a Caltrain parking structure, high density residential, and office uses. Under the CBD zoning, density could exceed the 40 units per acre allowed under the R-4 zoning, and offices could be allowed, which the R-4 district does not allow.

Like the proposed project, the Modified Land Use Alternative would require modifications to existing General Plan designations and zoning. The Modified Land Use Alternative would allow development of similar mixed-use projects as currently envisioned in the Downtown Specific Plan for the Downtown Core Area. Development of additional mixed-use development outside the

Downtown Core adjacent to the Caltrain station and existing mass transit facilities would be consistent with the goals and objectives of the project.

Monterey Road Narrowing Design Alternative

The impact of the Project Alternate to the intersection of Monterey Road and Dunne Avenue identified in this EIR could be avoided by limiting the proposed narrowing of Monterey Road to between Main Avenue and Fifth Street, with a transition to four lanes between Fifth Street and Dunne Avenue. This alternative would avoid the LOS impact to Monterey Road and Dunne Avenue when compared to the Project Alternate. All of the other impacts of the Project Alternate would remain the same and the impacts of this modification to the Project Alternate are not discussed further.

The Monterey Road Narrowing Design Alternative is feasible from a land use and planning standpoint. Like the Project Alternate, this design alternative would require an amendment to the City's General Plan Circulation Element. This design alternative would allow the same development as the Project and Project Alternate and would meet the basic objectives of the project.

Environmentally Superior Alternative(s)

The CEQA Guidelines specify that an EIR must identify the environmentally superior alternative among those alternatives discussed. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. [Section 15126.6(e)(2)]

The No Project would be the environmentally superior alternative. The Reduced Scale Alternative, which effectively is very similar to the No Project Alternative but would result in much less development than the No Project Alternative, would avoid most of the significant impacts of the project.

All of the alternatives included in the EIR are believed to be feasible from a physical and regulatory standpoint. Funding the infrastructure, parking, lighting and landscaping improvements in the Downtown under the Reduced Scale Alternative may not be economically feasible given the substantially reduced amount of development allowed under this alternative.

The Reduced Scale Alternative would meet some of the objectives of the project regarding improving pedestrian facilities on Third Street; however, it would not meet most of the basic objectives of the project. The No Project Alternative would not meet most of the objectives of the proposed project. The Location Alternative sites would not meet many of the project objectives related to strengthening the Downtown, supporting Downtown businesses or creating a downtown neighborhood.

KNOWN VIEWS OF LOCAL GROUPS AND AREAS OF CONTROVERSY

Issues raised by residents of the City of Morgan Hill have included concerns related to traffic, narrowing of Monterey Road, and parking spillover in residential neighborhoods. Other issues and concerns raised include whether or not the existing Granada Theater building is historic or not, and whether it should be demolished to allow for a new mixed use development at the existing location of the Granada Theater. The qualified historic professional who evaluated the existing Granada

Theater building determined that it did not qualify as a historic building under the National, California, or local register criteria. The Morgan Hill Redevelopment Agency, which owns the existing Granada Theater as well as several other properties downtown, has provided direction to pursue a project to relocate the existing Granada Theater sign and marquee to a new theater to be constructed as part of a new mixed use theater building one block to the south of the existing theater.

SECTION 1.0 INTRODUCTION

1.1 INTRODUCTION

This document has been prepared by the City of Morgan Hill as the Lead Agency in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The purpose of this Environmental Impact Report (EIR) is to inform decision makers and the general public of the environmental effects of the proposed project, to identify ways in which the significant effects might be minimized, and to identify alternatives to the project that could avoid or reduce those significant impacts.

This document includes descriptions of the physical environment in the vicinity of the project, as those conditions existed at the time the EIR Notice of Preparation was circulated starting on January 9, 2008. The consideration and discussion of environmental impacts that result from the development in the project area evaluate whether the environmental effects are significant; that is: do those effects exceed stated levels, or "thresholds" of significance. Mitigation measures, proposed to minimize the identified significant environmental effects, are also described in the discussion of environmental impacts and mitigation measures, per CEQA Guidelines Section 15126.

The proposed Morgan Hill Downtown Specific Plan project consists of modification of relevant plans and policies in order to encourage a series of redevelopment activities within the Specific Plan boundary and adjacent blocks which are intended to enhance the City's Downtown and allow for an intensification of residential, retail, and commercial development in this area. The scope of these proposed redevelopment activities are described in detail in *Section 2.0 Description of the Proposed Project.*

This EIR is a Master EIR that, in conformance with CEQA Guidelines Section 15175(a), is intended to identify the impacts of the Downtown Specific Plan in order to streamline the later environmental review of projects and approvals required to implement the plan. This Master EIR includes all available information with regard to the kind, size, intensity, and location of subsequent projects envisioned under the Downtown Specific Plan, per CEQA Guidelines Section 15176(b). Once the Master EIR is certified, subsequent projects consistent with the Downtown Specific Plan (including later site-specific approvals) may rely on the analysis contained in this Master EIR, per CEQA Guidelines Section 15176(d). At the time subsequent development projects are proposed within the Downtown Specific Plan project area only limited environmental review will be required. Neither a new environmental document, such as an EIR, nor the preparation of EIR findings per CEQA Guidelines Section 15091 shall be required of a subsequent project when the Lead Agency (City of Morgan Hill) determines the following, pursuant to CEQA Guidelines Section 15177(b):

- The subsequent project was described in the Master EIR and, through the preparation of an Initial Study, is not found to cause any additional significant effect on the environment which was not previously examined in the Master EIR.
- On the basis of written findings, no additional significant environmental effect will result from the proposal, no new additional mitigation measures or alternatives may be required and the project is within the scope of the Master EIR.

Whether a subsequent project is within the scope of the Master EIR is determined by the Lead Agency based upon a review of the Initial Study to determine whether there are additional significant effects or new additional mitigation measures or alternatives required for the subsequent project that are not already discussed in the Master EIR. Prior to approval of a subsequent project covered under the Specific Plan and Master EIR, the Lead Agency is required to incorporate all feasible mitigation

measures or feasible alternatives appropriate to the project that are included in the certified Master EIR. The Lead Agency shall also provide public noticing of the use of the Master EIR and action on the subsequent projects pursuant to CEQA Guidelines Section 15177(d) and (e).

1.2 PROJECT LOCATION AND BACKGROUND

The 115-acre Downtown Specific Plan area is bounded by Main Avenue to the north, Butterfield Boulevard to the east, Dunne Avenue to the south, and Del Monte Avenue to the west (refer to Figures 1-2).

Modifications to General Plan designations and/or zoning districts are also proposed in areas north and south of the Specific Plan boundaries (refer to Figure 2). Areas where both the General Plan land use designation and zoning would change include two blocks covering approximately 12 acres. In addition, the *Central Commercial/Residential District* (CC-R) zoning on approximately 34 acres would be amended to increase the maximum density allowed from 18 to 20 dwelling units per acre (refer to Figure 2).

1.3 ORGANIZATION OF THE DRAFT EIR

The Draft EIR includes the following sections:

Summary

The Summary of the Draft EIR, which precedes this introduction, includes a brief description of the proposed project and summarizes the project's impacts, mitigation measures, and alternatives to the project. The summary also briefly describes any known areas of public controversy and the views of local groups.

Section 1.0 Introduction

This section provides a general overview of the CEQA process, describes the public participation process and opportunities for input, and outlines the contents of the Draft EIR.

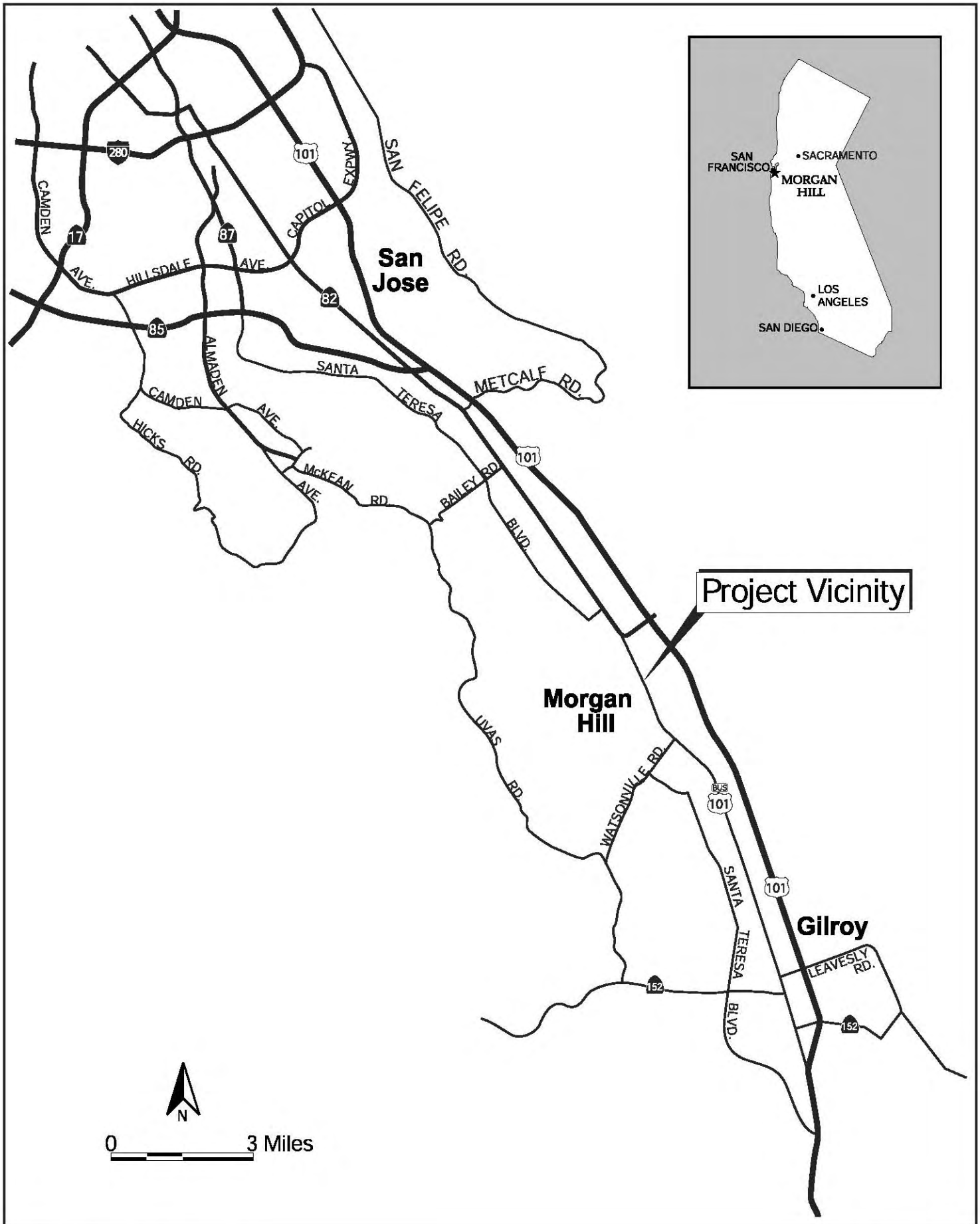
Section 2.0 Description of the Proposed Project and Project Objectives

This section describes the physical and operational characteristics of the proposed project (at both a program level and project level). Information on the location of the project and assumptions about implementation of the proposed project is addressed in this section.

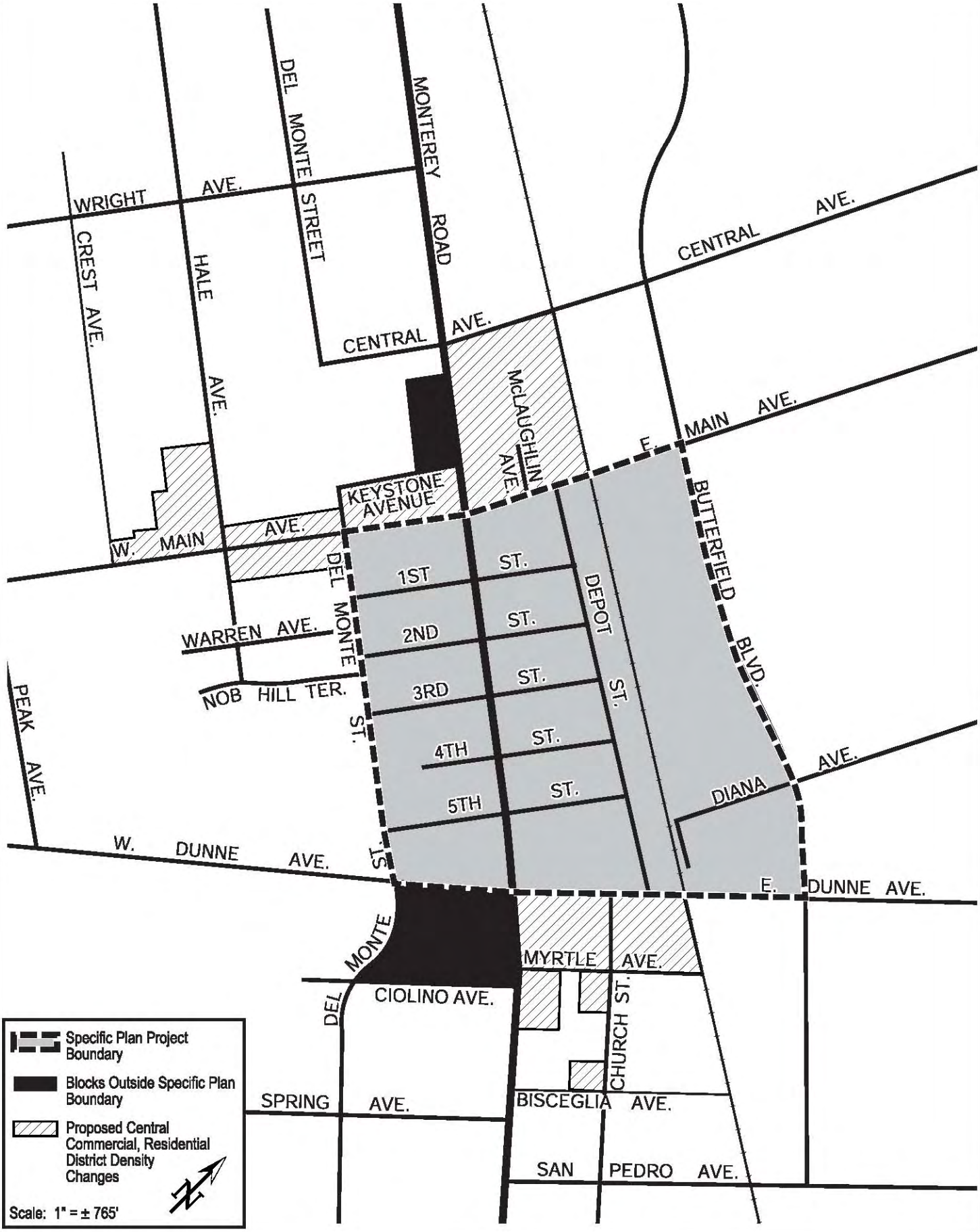
The objectives for the project and the intended uses of the Master EIR are also listed in this section.

Section 3.0 Environmental Setting, Impacts, and Mitigation

The Environmental Setting, Impacts, and Mitigation section includes descriptions of the physical setting of the project area, identifies environmental impacts resulting from the project, and identifies mitigation measures for the environmental impacts examined in the EIR. The Draft EIR identifies proposed mitigation measures for significant impacts in this section and briefly evaluates effectiveness/feasibility of these measures.



REGIONAL MAP FIGURE 1



VICINITY MAP

FIGURE 2

Each impact is numbered using an alpha-numerical system that identifies the environmental issue. For example, **Impact BIO-1** denotes the first impact in the biological resources section. Mitigation measures and conclusions are also numbered to correspond to the impacts they address. For example, **MM TRANS-2.1** refers to the first mitigation measure for the second impact in the transportation section. "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guideline 15370). Measures that are required by law or are City standard conditions of approval are categorized at "Standard Measures." Measures that are proposed that will further reduce or avoid already less than significant impacts are categorized as "Avoidance Measures." The letter codes used to identify environmental issues are listed as shown below.

Letter Codes for Environmental Issues	
Letter Code	**Environmental Issue**
AQ	Air Quality
BIO	Biological Resources
CULT	Cultural Resources
ENER	Energy
GEO	Geology and Soils
HM	Hazards and Hazardous Materials
HYDRO	Hydrology and Water Quality
LU	Land Use
NV	Noise and Vibration
PH	Population and Housing
PS	Public Facilities and Services
TRANS	Transportation
UTIL	Utilities and Service Systems
VIS	Visual and Aesthetic Resources

Section 4.0 Growth Inducing Impacts

The discussion of growth inducing impacts addresses the ways in which the proposed project could foster economic or population growth or the construction of additional housing in the surrounding area.

Section 5.0 Cumulative Impacts

This section includes a discussion of cumulative environmental impacts of the project along with other past, pending and future development in the area.

Section 6.0 Significant Unavoidable Impacts

This section lists any significant unavoidable impacts that could result if the proposed project is implemented.

Section 7.0 Consistency with Relevant Plans and Policies

The project's conformance with objectives, goals, and policies in applicable General Plans and regional plans is described in this section.

Section 8.0 Alternatives to the Proposed Project

This section identifies a reasonable range of alternatives to the proposed project which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen the significant impacts of the project. The environmental impacts associated with each alternative are discussed and a comparison of the impact to those of the project presented. Each of the alternatives is assessed to determine its ability to meet the objectives of the City of Morgan Hill.

Section 9.0 Significant Irreversible Environmental Changes

This section discusses the irreversible commitment of natural resources that could occur as a result of the implementation of the Specific Plan.

Section 10.0 References

This section lists the references, persons, and organizations consulted during preparation of the Draft EIR.

Section 11.0 List of Preparers

This section lists the lead agency staff and consultants who participated in preparation of the Draft EIR.

1.4 REFERENCE AVAILABILITY

Copies of the documents referred to in this EIR are available for review during normal business hours at:

City of Morgan Hill
Community Development Department
17575 Peak Avenue
Morgan Hill, CA 95037

Morgan Hill Public Library
660 West Main Avenue
Morgan Hill, CA 95037

1.5 PUBLIC PARTICIPATION IN ENVIRONMENTAL REVIEW

The City of Morgan Hill, as required under CEQA, encourages public participation in the environmental review process. Opportunities for comments by public agencies and the public include responding to the Notice of Preparation of the Draft EIR, participation and comment at a public scoping meeting, written comments on this Draft EIR, and presentation of written or verbal comments at future public hearings.

A Notice of Preparation for this Draft EIR was circulated from January 9, 2008 to February 7, 2008. Responses to the Notice of Preparation are included in Appendix A of this document. In addition, an EIR scoping meeting was held for the project at the Planning Commission meeting of January 29, 2008 (refer to Appendix A).

Under the California Environmental Quality Act (CEQA), the Lead Agency is required, after completion of a Draft Master EIR, to consult with and obtain comments from public agencies having jurisdiction by law with respect to the proposed project, and to provide the general public with an opportunity to comment on the Draft Master EIR. The Draft Master EIR will be available for review

during the 45-day public review and comment period at the City of Morgan Hill, Morgan Hill Library, and on the City's website. Written comments concerning the environmental review contained in this Draft EIR must be submitted to the Lead Agency, the City of Morgan Hill, to the attention of Kathy Molloy Previsich, Community Development Director, City of Morgan Hill, 17575 Peak Avenue, Morgan Hill CA 95037 during the 45-day public review and comment period.

SECTION 2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.1 PROJECT OVERVIEW AND BACKGROUND

The proposed 2008 Morgan Hill Downtown Specific Plan (Specific Plan) would amend the Morgan Hill General Plan and the City's Zoning Ordinance for the downtown area and modify relevant plans, policies, and design guidelines which guide and regulate development in the area. The Downtown Specific Plan, consistent with Government Code Section 65451, includes proposed changes to existing and planned land uses, circulation, parking, urban design guidelines, signage guidelines, infrastructure, and an implementation plan.

The Specific Plan updates planning for the downtown that began in 1981. The first Downtown Plan was created in 1981 to address issues of downtown revitalization, which was necessary due to changes stemming from completion of US 101 and a shift of traffic from Monterey Road through the downtown area to the highway. The 1981 plan included a series of recommendations for the downtown area. Many of these recommendations have been implemented, including median and sidewalk improvements to Monterey Road. In 2003 the Downtown Plan was updated with new recommendations and guidelines for downtown improvements. Certain aspects of the 2003 Downtown Plan, such as ordinances to increase density on certain opportunity sites and modification of certain parking requirements, were adopted by the Morgan Hill City Council in 2004.

The currently proposed Specific Plan contains a number of strategies to further invigorate the downtown. These strategies include:

Within the Specific Plan Boundary

- Modify the *Mixed Use* land use designation and create a new *Central Business District* (CBD) zoning district within the Downtown Core. In this area, density would be regulated through development standards such as building height and Floor Area Ratio (FAR)[1] rather than maximum density. Maximum building height would range from three to four stories and Floor Area Ratio from 2.0 to 2.25, depending on property size. Greater height and FAR would be possible through adoption of a Planned Development rezoning ordinance, which would effectively also be an amendment of the Specific Plan to reflect the PD zoning.
- Change land use designations and zoning near Dunne Avenue and Fifth Street such that allowed residential density would increase from *Multi-Family Low* (5-14 dwelling units per acre) to *Multi-Family Medium* (14-21 dwelling units per acre).
- Redesignate and rezone a 6.2 acre site between Butterfield Boulevard and the Caltrain commuter train station from *Public Facilities* to *High Density Residential/Planned Development* (21-40 dwelling units per acre). Any FAR greater that 2.25 or height greater than four stories on this parcel would require a PD zoning amendment of the Specific Plan.

Outside the Specific Plan Boundary

- Increase the maximum density on parcels zoned *Central Commercial/Residential District* (CC-R) from 18 units per acre to 20 units per acre on properties located north, south and west of the Specific Plan boundary.

[1] Floor area ratio (FAR) refers to is the relationship between the total floor area in a building or buildings, and the total surface area of the parcel on which the building or buildings are located. A two-story building with 43,560 square feet of floor area on a one-acre property (an acre having 43,560 square feet) would cover one-half of the parcel at an FAR of 1.0.

- Redesignate and rezone approximately 2.1 acres of the Britton School play field fronting Monterey Road from *Public Facilities* to *Mixed Use* and CC-R zoning (up to 20 units an acre).
- Redesignate and rezone approximately 10 acres south of the Specific Plan Core area and Dunne Avenue (block at southwest corner of Dunne Avenue and Monterey Road) from *Commercial* to *Multi-Family Medium* and *Mixed Use* and *Medium Density Residential* (R3) and *CC-R* zoning, respectively.

In addition, the Specific Plan incorporates requirements and standards to encourage additional commercial space and office space within the downtown. These standards include floor-to-ceiling heights and minimum and maximum ground floor retail depths to ensure that new building space is appropriate for retail and restaurant uses in the Downtown Core. The Specific Plan also includes a Parking Strategy to increase, improve, and stabilize the supply of parking available to the public in the Specific Plan area, and identifies the possibility of narrowing Monterey Road through downtown to create a more pedestrian-friendly atmosphere and/or increase parking supply through the use of angled parking spaces.

The "Project" assumes Monterey Road remains at its four-lane configuration and Depot Street is closed at Dunne Avenue for a Railroad Grade Separation project; consistent with the existing General Plan Circulation Element; while a "Project Alternate" would require an amendment to the Circulation Element within the Downtown under which the Monterey Road is narrowed to two lanes, Depot Street would remain connected to Dunne Avenue, and there would be no railroad grade separation project.

The amount and rate of residential growth city-wide is controlled by the Residential Development Control System (RDCS) first adopted through voter initiative Measure E in 1977. As part of the General Plan, the RDCS regulates growth by limiting the number of new homes approved for construction each year. The RDCS has helped to ensure that residential development pays for itself, is directed to areas served by adequate infrastructure, and that the rate of development does not exceed the availability of public services and infrastructure. The General Plan currently assumes that the maximum city-wide construction rate of approximately 220-250 units per year will continue through 2020. In 2004, the City's RDCS was amended to make it easier for higher density residential and vertical mixed-use downtown projects to compete for residential building allocations. In 2005, the City allocated 255 residential building units within the boundary of the Specific Plan through 2010. In November 2006, voters approved a ballot measure (which modified the RDCS) to allocate 100 additional units for projects of 25 units or less within the Downtown Specific Plan boundary. This allocation allows downtown projects with allocations spread out over multiple years to advance the timing of construction. In order to continue to encourage attached, mixed use housing projects that are difficult to phase in over several years, the City Council proposed a ballot measure that would allow an exemption for 500 residential allocations by 2020 in the downtown for projects that are consistent with the land use designations and zoning of the proposed Downtown Specific Plan. That ballot measure was approved by the voters in May 2009. Projects containing residential units will not need to compete for allotments, but will still need to obtain a Design Permit prior to submittal for building permits.

The following discussion describes the components of the Specific Plan project in more detail.

2.1.1 Proposed General Plan Land Use Designations

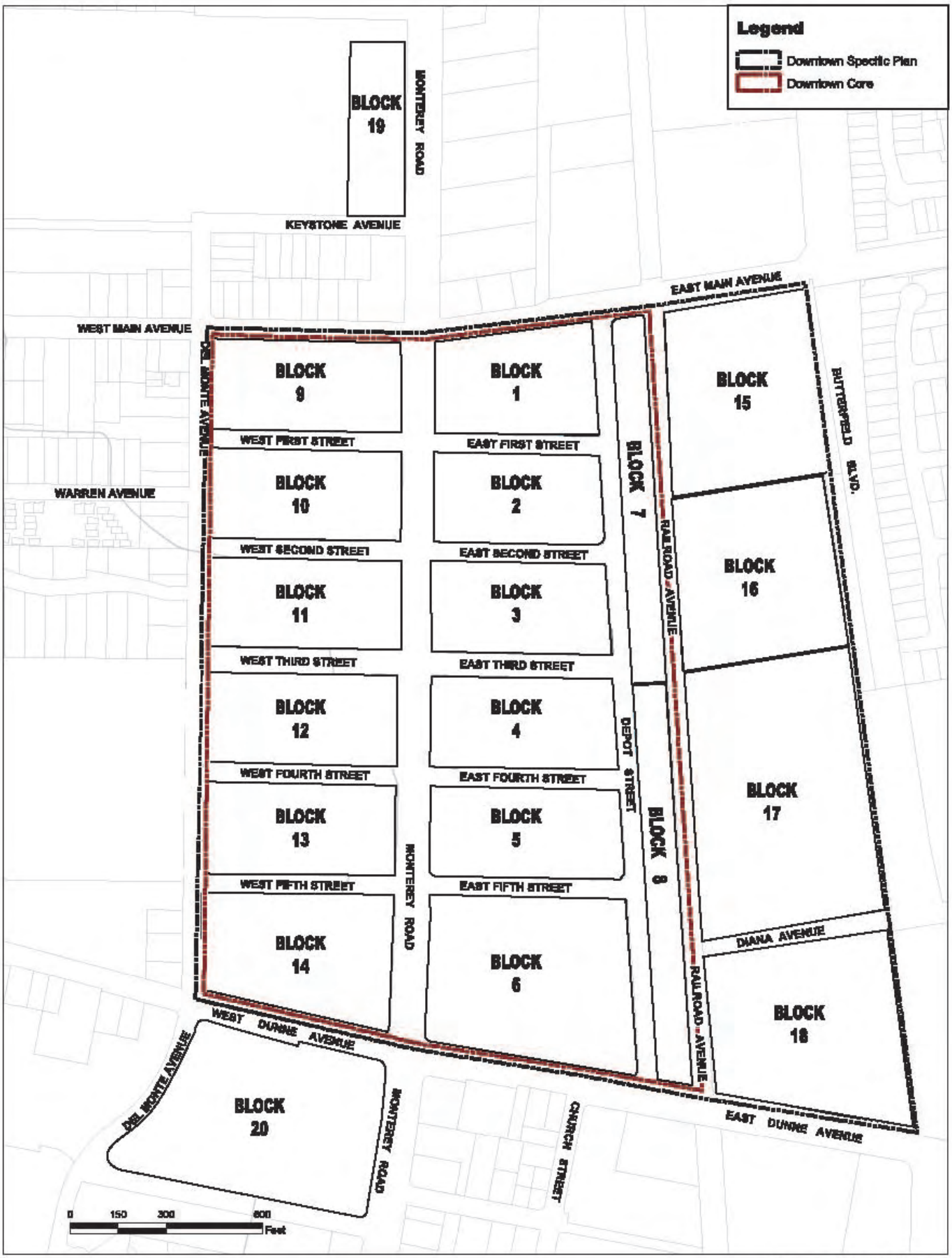
Within the Specific Plan boundary the project proposes to change the planned land use on 21 parcels west of Monterey Road on Fourth Street, Fifth Street, Dunne Avenue, and Del Monte Avenue from *Multi-Family Low (5-14 du/ac)* to *Multi-Family Medium (14-21 du/ac)*. The plan would also amend the land use designations on the Valley Transportation Authority (VTA)/Caltrain parking lot from *Public Facilities* to *Multi-Family High (21-40 du/ac)/Public Facilities*, as well as amend two additional properties outside the Specific Plan boundaries. The amendments outside the Specific Plan boundaries include 2.1 acres of the Britton Middle School site at Monterey Road and Keystone Avenue (Block 19) from *Public Facilities* to *Mixed Use* and the southwest corner of West Dunne Avenue and Monterey Road (Block 20) from *Commercial* to *Mixed Use* and *Multi-Family Medium (14-21 du/ac)*. The *Mixed Use* land use designation would also be amended outside the Downtown Specific Plan boundary to increase the maximum residential density to 20 dwelling units per acre. The Specific Plan would also create the new mixed use land use designation *Central Business District (CBD) Mixed Use* that would have no maximum residential density per acre. The new *CBD Mixed Use* land use designation would apply to all parcels located within the Downtown Specific Plan Core that are currently designated *Mixed Use*. The location of the Specific Plan blocks is shown in Figure 3. Existing and proposed General Plan land use designations are shown in Figure 4.

2.1.2 Proposed Zoning Districts

In order to maintain consistency with the proposed General Plan land use designations, 21 parcels west of Monterey Road between Fourth Street, Fifth Street, Dunne Avenue, and Del Monte Avenue would be rezoned from *(R-2) Medium-Density Residential District* to *(D-R3) Medium-Density Residential District*. The VTA/Caltrain parking lot (Block 16) would be rezoned from *Public Facilities District* to *Downtown High-Density Residential District (D-R4)/Planned Development (PD)*. Parcels currently zoned *Central Commercial/Residential District* and *Planned Unit Development* would be rezoned to *Central Business District* (refer to area shown as "CBD" on Figure 5). Two additional blocks would also be rezoned from *Public Facilities District* to *Central Commercial/Residential District* (CC-R) (Block 19) and from *Planned Unit Development District (PUD)* to *Central Commercial/Residential District* (CC-R) and *R-3 Medium-Density Residential* (Block 20). Existing and proposed zoning districts are shown on Figure 5.

The *Central Commercial/Residential District* would be amended to increase the maximum density allowed from 18 to 20 dwelling units per acre. Parcels zoned CC-R that would be allowed density increases are shown in Figure 6.

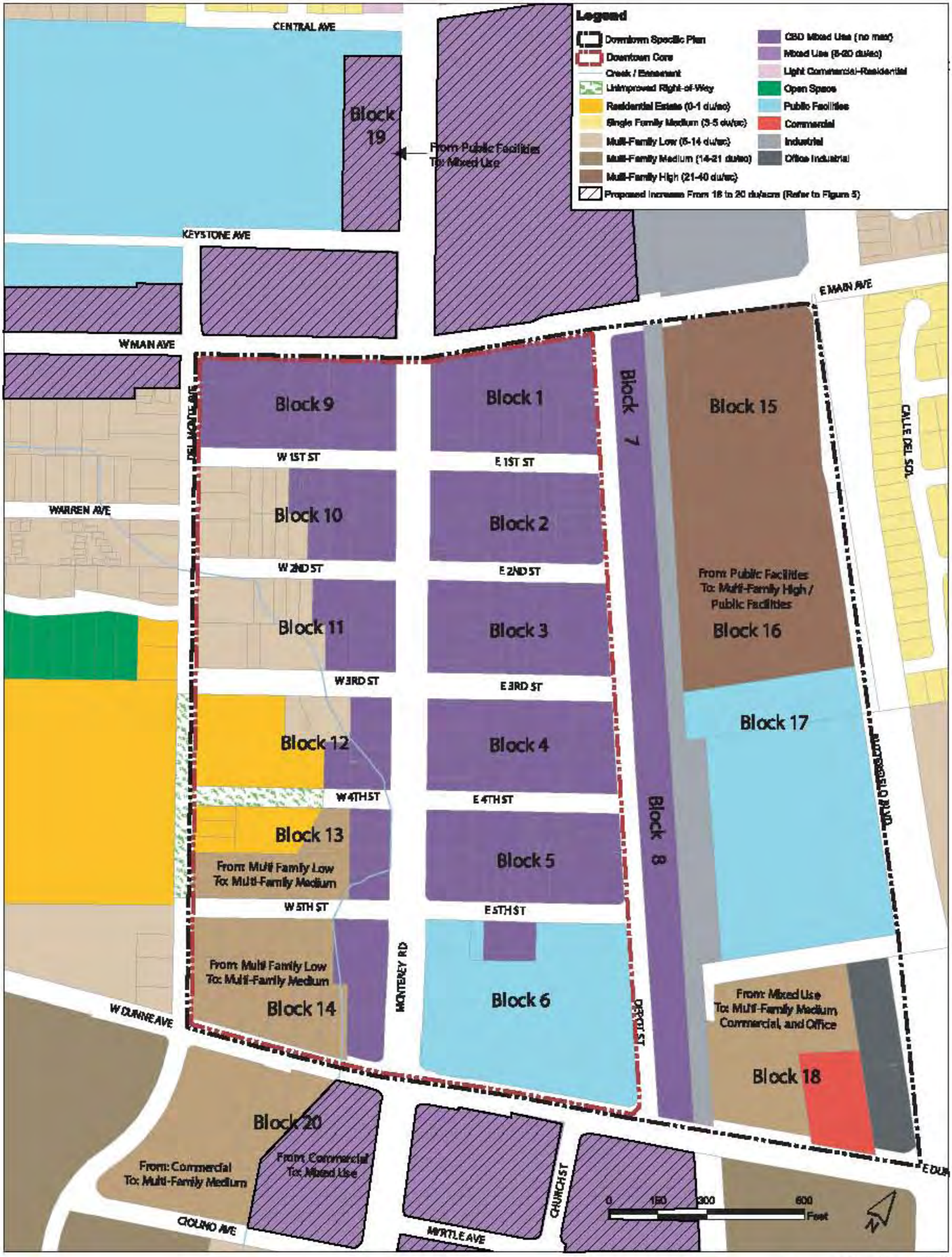
Unless otherwise noted, for ease of description, parcels within the Specific Plan boundary, Blocks 19 and 20, and parcels zoned CC-R are generally referred to throughout this document as the Specific Plan project area. Where relevant, impacts to individual blocks and the CC-R parcels are identified separately.



Source: City of Morgan Hill

SPECIFIC PLAN BLOCKS

FIGURE 3



Source: City of Morgan Hill

EXISTING AND PROPOSED GENERAL PLAN LAND USE DESIGNATIONS FIGURE 4

Proposed Zoning District Regulations and Standards

The development standards identified in the Specific Plan, as summarized in Table 2.1-1, supercede those in the Zoning Ordinance for properties within the Specific Plan boundary. These standards are described in detail in Appendix B.

In addition to the modifications to existing zoning districts, the project includes the creation of one new zoning district and modifications to an overlay which are described below.

Central Business District

The Central Business District (CBD) designation generally would be applied to parcels within the Downtown Core of the Specific Plan, along Monterey Road and the blocks to the east. This zoning designation would require a minimum lot area of 4,000 square feet and minimum building size of two stories in height with an allowable floor area ratio (FAR) of 2.0. The maximum building height would be four stories on parcels larger than 22,000 square feet with an allowed FAR of 2.25. Fourth floors, when allowed, would require a stepback subject to review and approval of a Design Permit. Setbacks would range from zero to ten feet for commercial/office/mixed use development and five feet to 15 feet for residential development. This zoning district would replace the existing CC-R District and some Planned Unit Development Districts and Residential Planned Development Districts within the Downtown.

Ground Floor Overlay

The *Ground Floor Overlay* (GFO) district would be applied to parcels within the Specific Plan boundary as shown on Figure 7. This retail overlay district applies to parcels with frontage along portions of Monterey Road and Third Street. This district would be modified by instead of applying to all property within seventy-five feet of the property line adjacent to Monterey Road or Third Street, it would be a minimum of 50 feet on Third Street and 60 feet on Monterey Road. The minimum retail depth at all corners would be 80 feet. The downtown Ground Floor Overlay district would be restricted to retail shops, restaurant, entertainment uses, and service commercial businesses that support a continuity of display window visual interest, such as florists and dry cleaners.

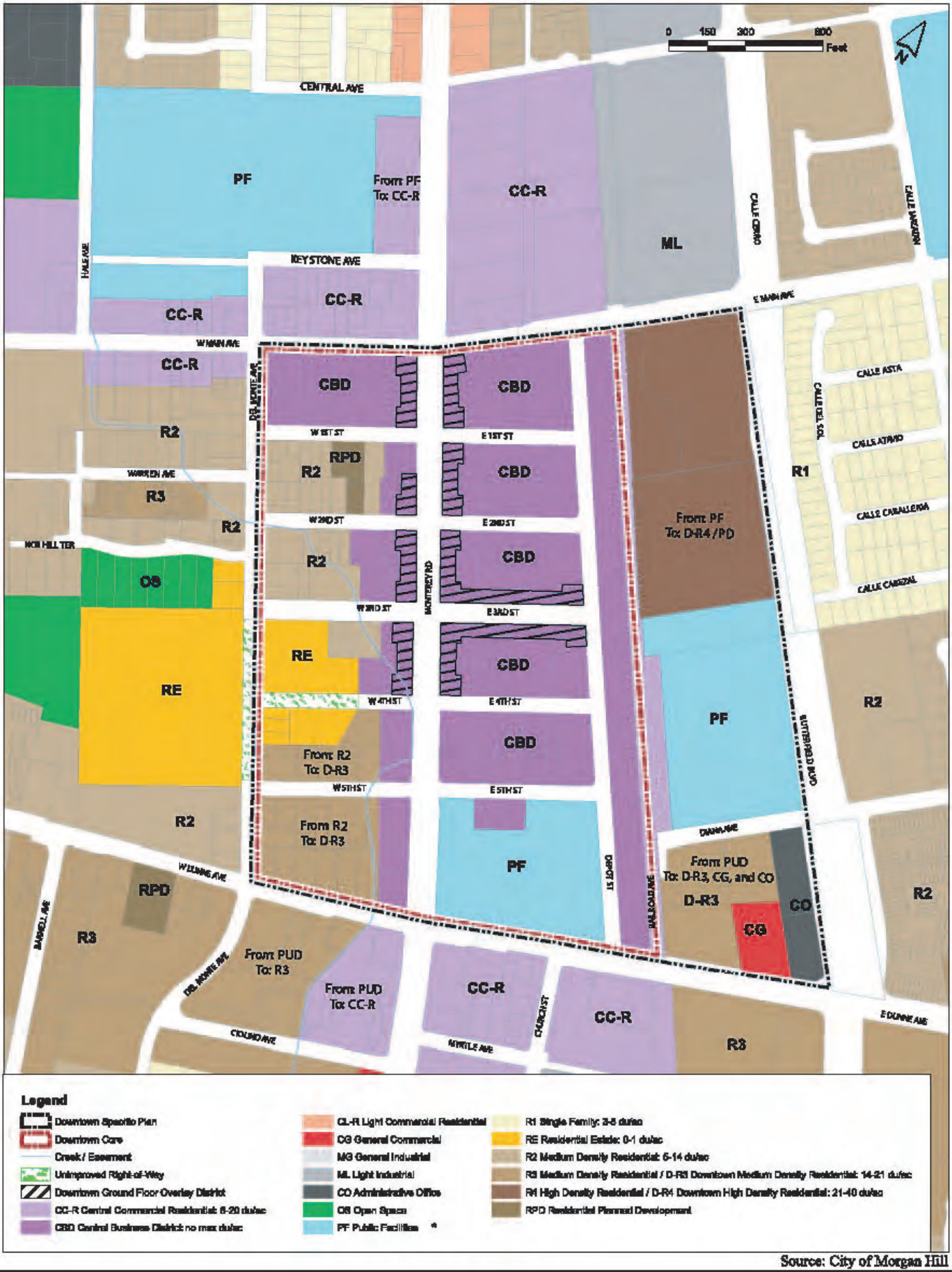
For projects consistent with the Development Standards in the Specific Plan, including the Ground Floor Overlay District requirements, only a Design Permit would be required for future projects that qualify for the 500 residential unit exemptions, with a possible requirement for a Development Agreement to secure the allotments.

Table 2.1-1
Specific Plan Zoning Development Standards

Zoning	Standard								
	Lot Area (sf)	Min. Width (ft)	Min. Depth (ft)	Max. Bldg. Coverage (%)	Max. Bldg. Height (ft)	Parking	Minimum Setbacks (ft)		
							Front	Rear	Side
Residential Estate (RE)	10,000	150	150	25	30	Per Ordinance	50	25	25
Downtown Medium-Density Resid. (D-R2)	3,400/ 1,500 per unit	40	85	50	30	Per Ordinance	20	15	5
Downtown Medium-Density Resid. (D-R3)	3,200/ 1,200 per unit	40	80	75	35	Per Ordinance	15	15	5
Downtown High-Density Resid. (D-R4)	3,000/ 700 per unit	40	75	80	45	Varies*	10	15	5
Downtown Public Facilities (D-PF)	**	**	**	**	45	Per Ordinance	**	**	**
Planned Devt.***	NA	NA	NA	NA	NA	NA	NA	NA	NA
Central Business Dist.	3,500	40	75	** 2.0 or 2.25^{+} FAR	55 to rooftop plate	Varies*/unit, 2.8/1,000 s.f. retail, 4.0/1,000 s.f. office	0/6^{++}	0/ 10^{++}	0/5^{++}

Notes:
*1.0 space per units of less than 600 sf, 1.5 spaces per units 600 to 1,350 sf, and 2.0 spaces for units of 1,350 sf or more. Parking requirements based on all new and redeveloped dwelling units.
**Not Specified
***The PD overlay district may be applied to any zoning district that proposes to deviate from the standards of the underlying zoning district.
$^{+}$Sites of 22,000 square feet or greater could have a 2.25 FAR and be 4-stories in height.
$^{++}$Residential development would require greater setbacks than commercial development.
NA = Not applicable to this zoning district.

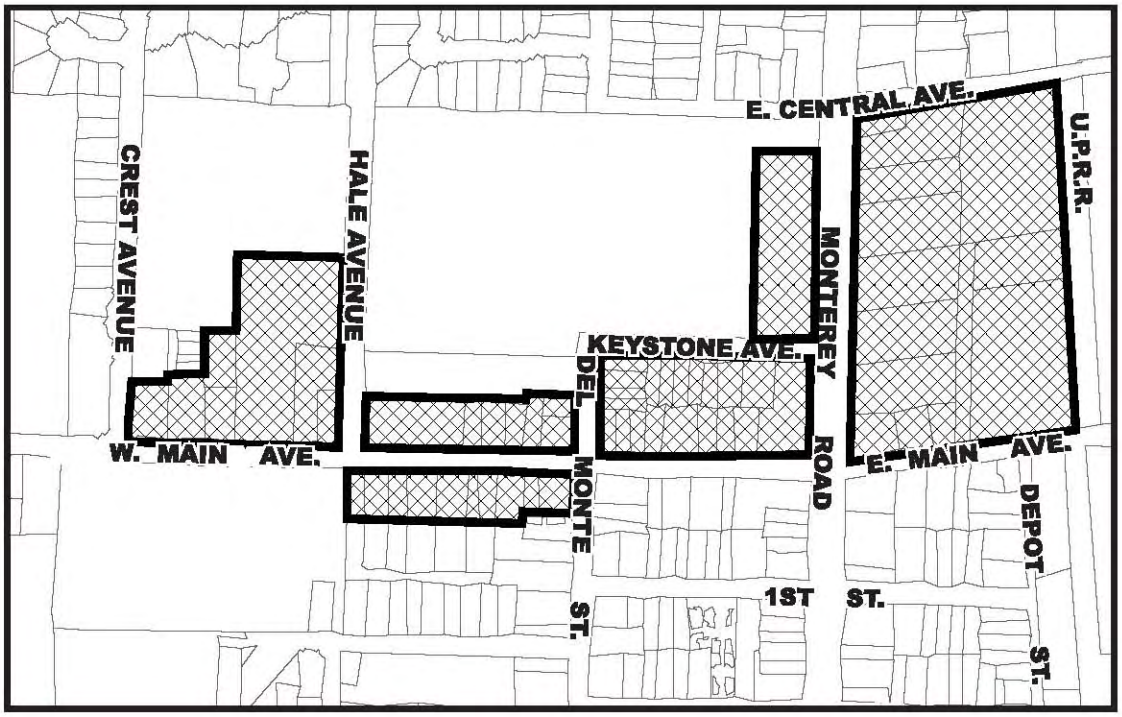
The Specific Plan recognizes that in the near term, not all first floor locations within the *Ground Floor Overlay District* may be able to accommodate retail uses. The Specific Plan allows for issuance of a *Downtown Administrative Use Permit* (DAUP) that would allow for alternative uses once an application is evaluated and specific criteria are met. The DAUP would allow for commercial, professional and medical office uses, and personal service uses to locate in first floor locations on parcels located within the GFO district if the retail market does not yet accommodate retail use. A DAUP would be valid for three years and may be extended for three years for each extension.

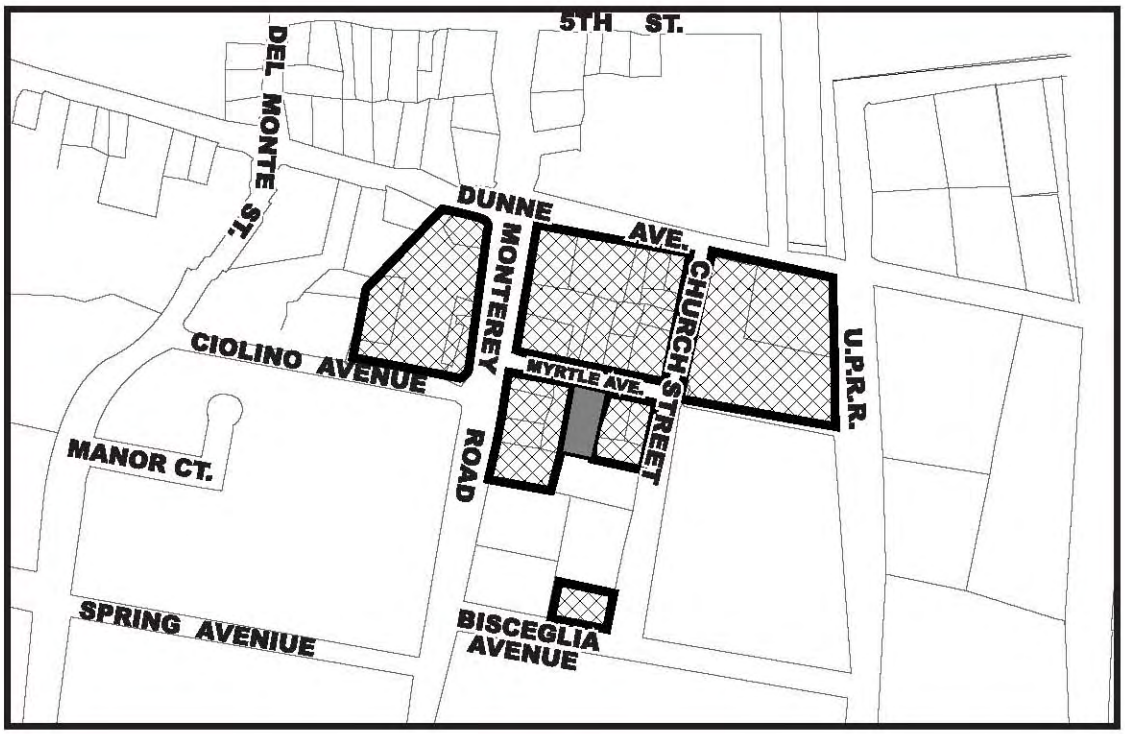


Source: City of Morgan Hill

EXISTING AND PROPOSED ZONING DISTRICTS

FIGURE 5





Central Commercial, Residential District

Residential Planned Development

Note: Proposed general plan land use designation for these parcels is mixed use (up to 20 units/acre).

N.T.S.

CENTRAL COMMERCIAL, RESIDENTIAL DISTRICT LOCATIONS FIGURE 6

Source: City of Morgan Hill

PROPOSED LOCATIONS OF GROUND FLOOR RETAIL OVERLAY FIGURE 7

Source: City of Morgan Hill

RETAIL BUILDING DEPTH RECOMMENDATIONS

FIGURE 8

2.1.3 Proposed Specific Plan

Since buildout/redevelopment of the Specific Plan project area may occur slowly, over time, the City has identified both 2015 interim project conditions as well as 2030 projected conditions. It is also possible that economic factors may contribute to a much quicker scenario. An EIR cannot predict the future, but this two part analysis (2015 and 2030) allows for disclosure of likely impacts at two points in time.

Current development in the Downtown Specific Plan project area boundary includes approximately 213,365 square feet of retail[2], 122,248 square feet of offices, 1,500 square feet of industrial, 53,000 square feet of public facilities and 201 residential units. The following section describes the assumptions for future development in the Downtown area under the proposed project.

Development Projections

The purpose of the development projections is to identify the likely development that might reasonably be assumed to occur by the 2015 and 2030 timeframes in order to provide CEQA clearance for future projects developed consistent with the Specific Plan. This EIR, including the water supply assessment and parking analysis, analyzes the impacts of the project based on the identified likely development projections for the Specific Plan project area (Blocks 1-20) shown in Table 2.1-2. The traffic impact analysis was based on an amount of development closer to buildout assumptions for the Specific Plan and assumes a higher redevelopment rate for the planned uses. Both the water supply assessment and the traffic impact assumptions represent conservative analyses of development impacts under the Specific Plan. The Specific Plan provides that the City will monitor actual levels of development over time, in order to ensure that the EIR analysis and mitigation measures, as adopted, remain valid for subsequent projects. It also provides for an update of the analysis, as may be required.

Projections through 2015

As shown in Table 2.1-2, the City's development projections for 2015 include approximately 21,221 square feet of new retail space, 850 residential units, and 30,157 square feet of office space within the Downtown Specific Plan project area. The projected retail development assumes replacement of approximately 38,900 square feet of existing retail space.

For the purposes of this EIR, development projections through 2015 would result in an increase of 21,221 square feet of retail space, 850 residential units, and 30,157 square feet of office space.

Projections 2015 to 2030

The development projections from 2015 to 2030 include approximately 72,269 square feet of additional retail space, 55,434 square feet of new office space and 342 additional new residential units within the Specific Plan project area.

[2] For the purposes of the Specific Plan, the term "retail use" includes restaurants, entertainment uses, food and grocery stores, retail uses, home furnishings, and other uses determined to be retail in nature, as opposed to offices, personal services and the like.

Projections through 2030

The proposed Specific Plan project, including Blocks 19 and 20 and the intensification of the CC-R district, would result in a net increase of 93,490 square feet of retail space, 1,192 residential units, and 85,591 square feet of office space.

Table 2.1-2
Development Projections Blocks 1-20

Land Use	Existing Development[1]	Development by 2015		Development by 2030	
		Net New	Total	Net New	Total
Retail	213,365 s.f.	21,221 s.f.[2]	234,586 s.f.	93,490 s.f.	306,855 s.f.
Residential	201 DU	850 DU	1,051 DU	1,192 DU	1,393 DU
Office/Service	122,248 s.f.	30,157 s.f.	152,405 s.f.	85,591 s.f.	207,839 s.f.

Notes: DU = dwelling units, s.f. = square feet
[1]Blocks 1-20 excluding public facilities (including schools, Community and Cultural Center, churches, social halls) and industrial.
[2]38,900 s.f. of retail development to be replaced on Blocks 2-4.

2.1.4 Circulation and Streetscape Improvements

Proposed Project

The proposed project would retain the existing General Plan roadway network within the Specific Plan boundary. Monterey Road would remain at four vehicular lanes and Depot Street would be closed at Dunne Avenue to accommodate grade separation of the railroad tracks.

Project Alternate

The Project Alternate as allowed by the Specific Plan would narrow Monterey Road from the existing four lanes to two vehicular lanes. Depot Street would remain open and grade separation of the railroad tracks from Dunne Avenue would not be implemented. As a further option, Depot Street could be re-routed through the existing Community and Cultural Center parking lot to create an intersection/connection to Church Street at the existing signal location. This option would allow for a future Dunne Avenue grade separation project. The excess right-of-way resulting from reducing vehicular lanes on Monterey Road through downtown could be used for bike routes, sidewalk widening, and angled or parallel parking. The exact use of the right-of-way would be subject to a community decision-making process. Such a streetscape planning process could result in a recommendation that not all blocks be narrowed, for example Monterey Road between Dunne Avenue and Fifth Avenue could be retained with four lanes. For the purposes of this EIR, the Monterey Road narrowing is assumed to include all blocks between Main Avenue and Dunne Avenue, with parallel parking on both sides of the street, removal of the median, and sidewalk widening.

Traffic Calming Along Monterey Road

The Specific Plan identifies several improvements along Monterey Road to reduce traffic speeds, make crossing easier for pedestrians, and enhance the visual appearance of downtown. Future improvements to be considered include entry point treatments, such as trees, landscaping, and/or public art at the corners of Dunne Avenue and Main Avenue, special event banner signage, improvements linking the east and west sides of Monterey Road at Third Street, median landscaping and tree lighting, pedestrian crosswalk treatments, removal of speed humps concurrent with lane

reduction on Monterey Road, and the addition of bike routes consistent with the City's Bike Map. Many of these improvements were identified in the 2003 Downtown Plan and have begun to be implemented.

Third Street Improvements

Both the 2003 Downtown Plan and the 2008 Specific Plan include streetscape improvements for Third Street with one traffic lane in each direction, 25 on-street parallel parking spaces, and widened sidewalks. The sidewalks are proposed to be of sufficient size to accommodate outside dining, displays, and additional landscaping. Bulbouts[3] and a mid-block plaza are also proposed to encourage pedestrian activity and reduce vehicular speeds.

Depot Street

The Morgan Hill General Plan currently includes a future closure of Depot Street with a cul-de-sac at Fifth Street. This improvement was planned to occur with the construction of the Dunne Avenue railroad underpass and is assumed to be implemented as part of the Specific Plan Project. The proposed Specific Plan Project Alternate would maintain Depot Street as an alternate north-south route within the Downtown Core and retain the current at-grade railroad crossing on Dunne Avenue. As an option, Depot Street could be re-routed through the Community and Cultural Center parking lot to connect to Church Street at the existing signal location.

Other Downtown Streets

Under the Specific Plan, side streets in the Downtown Core would also be improved. Of the side streets, Fourth Street would be given the highest priority for improvements, followed by Second, First, and Fifth Streets and Main Avenue, all between Monterey Road and Depot Street. These roadways will remain two-way streets with mid-block crossings using bulbouts on commercial and mixed-use streets.

Multi-Modal Circulation

Pedestrian Links

The Specific Plan also encourages the use of pedestrian links to connect parking lots to Monterey Road, Third Street, larger developments such as the Sunsweet site on Block 4, and mid-block pedestrian connections between Third and Fourth Streets. The City and Santa Clara Valley Water District have developed preliminary plans for flood control improvements along West Little Llagas Creek that include a trail. Where right-of-way constraints and underground locations (from Second Street to Fourth Street) prevent development of a trail, the north and south trailheads will direct users to sidewalks and bike routes through Downtown.

For the purposes of this EIR, installation of an additional east-west pedestrian crossing of the UPRR tracks is assumed. The Specific Plan currently envisions the construction of this crossing could be either at or below grade, and could include provision for emergency vehicle access.

[3] Bulbouts or curb extensions extend the sidewalk or curb line into the street, reducing the street pavement width.

Bus Service

For bus transportation, the City staff would work with the Valley Transportation Authority (VTA) to coordinate the re-routing of Bus Route 68 to Depot Street to provide better transit connections in the downtown area.

2.1.5 Parking

The Specific Plan proposes to reduce the parking requirements for uses in the Specific Plan project area as shown in Table 2.1-3, below. The Specific Plan also proposes to allow the payment of in-lieu fees toward overall parking, streetscape improvements, and operation/maintenance of parking in the Downtown.

Table 2.1-3
Existing and Proposed Parking Requirements

Development Type		Required Parking Spaces	
		Zoning Ordinance	Proposed Specific Plan
Single-family		2 spaces (covered)	2 spaces
Multi-family	Studio or 1 bedroom (<650 sf)	1.5 spaces per unit	1 space per unit
	2 bedroom (601 to 1,350 sf)	2 spaces per unit	1.5 spaces per unit
	3 bedroom (>1,350 sf)	2.5 spaces per unit	2 spaces per unit
Commercial		4 spaces per 1,000 s.f.	2.8 spaces per 1,000 s.f.*
Office		4 spaces per 1,000 s.f.	4.0 spaces per 1,000 s.f.*

Notes: s.f. = square feet
*Non-residential parking is not required to be located on the site and the Parking Strategy proposes to increase the "public parking supply" to meet the parking requirements.

Based on the ratios listed in Table 2.1-3, buildout of the proposed Specific Plan would result in the need for an additional 808 parking spaces. In order to accommodate 2015 development projections, approximately 306 total public parking spaces would be needed. The City Council has stated a goal to increase the public parking supply by at least 500 spaces by 2015 and the Parking Strategy calls for on-going monitoring of the level of development and parking space creation to ensure adequate parking is financed and created.

The Specific Plan project would allow for the construction of underground and structured parking within the Specific Plan project area when feasible. Several locations have been identified for possible future public parking lots and parking structures. These locations and improvements include a parking structure on the current parking lot on Block 6 at the Community and Cultural Center, a joint parking structure on the existing Caltrain/VTA parking lot on Block 16, and a surface lot of 97 parking spaces and then a possible future parking structure on the warehouse site on Block 8 (surface lot completed in May 2009). The City currently estimates that 570 spaces could be provided on Block 6 with a three-story parking structure. Several other locations may be considered as sites for potential acquisition and construction of new parking structures. These sites include the existing lot behind the Downtown Mall, within the proposed Sunsweet Site on Block, or an existing vacant lot on Block 4, and the unpaved property fronting Monterey Road on Block 1.

Additional parking facilities could also be provided in the interior of several blocks within the Downtown consistent with the Specific Plan. Locations currently identified with potential for additional public parking facilities are shown on Figure 9.

The City proposes to improve the connectedness of parking lots through lighting and pedestrian linkages. The City may also provide an attendant-serviced bicycle parking station for rail transit users and downtown employees.

2.1.6 Design Guidelines

The Downtown Specific Plan includes Design Guidelines in order to preserve and enhance the unique qualities and pedestrian scale of the area. The Design Guidelines are intended to guide property owners and architects in the design of new buildings, exterior changes to buildings, and other improvements. Prior to issuance of any Design Permit, the decision-making body must make a finding of substantial conformance of the proposed design with the Design Guidelines.

Basic Design Principles

New buildings in the Downtown would maintain the basic patterns of parcel widths, building breaks, and façade articulation. Buildings on Monterey Road and Third Street would be designed in an architectural style compatible with traditional Main Street building features such as parapets with projecting decorative cornices, large ground floor display windows, deep-set upper floor windows, and decorative architectural details. Structures and landscaping on neighborhood streets located in the area to be retained in R-2 zoning west of Monterey Road would be visually compatible with the existing small-scale residential character of the area, while the area recommended for rezoning from R-2 to R-3 would reflect a more dense development pattern as already existing in that area with its mix of apartments and other residential buildings. Buildings on Monterey Road and Third Street would provide a visual continuity of display windows along with architectural and landscape details. Stock design and franchise architecture would not be accepted as a substitute for designs based on the structure's use and location. Signage would be pedestrian oriented and consistent with the Signage Guidelines contained in the Specific Plan. All new building and remodeling would utilize high quality materials and craftsmanship. Streetscapes would be designed to balance pedestrian safety, aesthetics, and the supply of on-street parking.

2.1.7 Signage Guidelines

Signs in the downtown would be limited to wall signs, awning signs, window signs, projecting signs, hanging signs, freestanding signs, plaque signs, governmental signs, directional signs and monument signs. Freestanding signs will be limited to businesses located on residential streets with lighting limited to small spot lights mounted above the sign or at ground level. Directional signs and kiosks within the Downtown Specific Plan area would be designed in accordance with the City-Wide Directional Sign Program. Street spanning or other entry features would be located on Monterey Road at the intersections with Main Avenue, Third Street, and Dunne Avenue. Kiosks would be located in strategic locations where there would be high volumes of pedestrian traffic. Monument signs may be required for larger projects but should not exceed 60 square feet and would be limited to the project name and logo or that of a single tenant.

OFF-STREET PARKING FACILITIES LOCATIONS FIGURE 9

2.1.8 Infrastructure

The development anticipated from the Specific Plan will be served by the following infrastructure improvements, some of which are already part of the City's Capital Improvement Project (CIP) and some of which are planned for within the next five to 10 years.

Transportation Improvements

Streets currently targeted for reconstruction with streetscape improvements include First, Second, Fourth, and Fifth Streets. Third Street would also be improved as described above in Section 2.1.4.

Water Service

The City's Water Master Plan includes increased capacity in the Downtown area, consisting of eight-inch pipelines to conform to current City standards. The City is also upgrading the water main from Monterey Road to the Peak/Main booster station to 12 inches in conformance with the Water Master Plan. The Specific Plan project assumes that these improvements to the City's Water Supply System would continue to be implemented prior to or as needed to serve new development during the lifetime of the plan. The improvements will be paid for by the Redevelopment Agency as part of street reconstruction projects or by private development as a condition of project approval. Developers that are conditioned to install increased capacity would be able to enter into a reimbursement agreement so that future development that uses the capacity of the line pays back their fair share.

Sanitary Sewer Service

The City's Sanitary Sewer Master Plan (2002) includes upgrading the existing pipelines within the Specific Plan Boundary to the current eight-inch City Standard. Additionally, the sewer main from just east of the railroad tracks on Main Avenue will be upgraded to Hale Avenue to 18 inches per the City's Sewer Master Plan. The Specific Plan assumes that these improvements to the City's Sanitary Sewer System would continue to be implemented prior to or as needed to serve new development during the lifetime of the plan. The improvements would be paid for by the Redevelopment Agency or private development as a condition of project approval. Developers that are conditioned to install increased capacity would be able to enter into a reimbursement agreement so that future development that uses the capacity of the line pays back their fair share.

Storm Drainage System

The City's Storm Drain Master Plan (2002) does not call for any improvements to the existing storm drain system in Downtown, except for the Upper Llagas Creek Flood Protection Project (also known as PL 566). The flood protection project has been completed downstream in the City of Gilroy; however the northerly upstream portion in Morgan Hill is not complete due to lack of funding. Progress on these improvements has been limited to right-of-way acquisition and preliminary engineering. The project will be comprised of open channels through the Downtown except where the creek now runs under Monterey Road and the shopping center on Block 20. Development within the floodplain that is approved under the Specific Plan would be required to comply with the Flood Damage Prevention ordinance which identifies standards for construction, subdivisions, utilities, and other issues. Although not identified in the Storm Drain Master Plan, future streetscape projects will be required to install new storm drainage improvements.

Electricity Service

The City recently completed undergrounding overhead utilities on Third Street between Monterey Road and Depot Street. The remaining overhead utility lines within the Downtown would be undergrounded at the time street improvements are made.

Parks

The Specific Plan includes the development of a passive park with creek interpretive elements on the City owned land on the north side of Third Street between Monterey Road and Del Monte Avenue, which will also be used for the Upper Llagas Creek Flood Control project (refer to Figure 10).

2.1.9 Implementation

The Redevelopment Agency anticipates investing up to $40 million in the downtown area to construct infrastructure projects and otherwise assist with implementation of the Specific Plan. The implementation strategy for the Specific Plan focuses primarily on the steps that can be taken by the public sector to encourage private development projects.

Implementation Programs and Plan for Investment

Redevelopment Agency Capital Improvements and Implementation Plan

The Redevelopment Agency anticipates funding the following projects and programs in the downtown area over the next five years:

- *Third Street Promenade Improvements:* Creation of a pedestrian friendly thoroughfare including street reconstruction, utility undergrounding, water and sewer improvements, landscaping, lighting, and various pedestrian amenities.
- *Downtown Street Revitalization Improvements:* Revitalization of various streets through traffic calming improvements, street furniture, median improvements, pavement repair/replacement, curb, gutter and sidewalks, lighting and landscaping enhancements and improvements, and utility undergrounding.
- *Downtown Entry Features:* The design and installation of downtown entry features to achieve the Specific Plan goals.
- *Courthouse Plaza Improvements:* The design and construction of a plaza connecting the Santa Clara County Courthouse (Block 17) to the pedestrian railroad crossing and Downtown (completed in 2009).
- *Parks and Pathways:* The design and construction of small parks or paths in and to the downtown area as outlined in the Specific Plan.
- *Downtown Parking:* Develop an adequate supply of accessible and affordable public parking per the Downtown Parking Management Strategy, including the acquisition/lease of parcels to preserve or expand existing parking and the design and construction of surface or structured parking.
- *Sewer Improvements:* Sewer plant improvements to eliminate sewer impact fees for residential and commercial properties in Downtown.
- *Historic Preservation:* Provide loans/grants to preserve historic resources in Downtown.

POTENTIAL PASSIVE PARK LOCATION **FIGURE 10**

- *Downtown Business Improvement and Assistance Programs:* The existing Façade Improvement Grant and Commercial Rehabilitation Loan programs. Develop programs to assist businesses during the construction of public improvements such as signage, advertising, and direct mailings.

Other Programs

The Redevelopment Agency would also continue to contribute funds to implement the Downtown Specific Plan through the following programs:

- *Capital Improvement Program*
- *Façade Improvement Program*
- *Downtown Commercial Rehabilitation Loan Program*
- *Housing Rehabilitation Grant and Loan Programs*

The Redevelopment Agency may also provide financial and other assistance to facilitate new construction projects that help implement the Downtown Specific Plan.

Phasing Plan

The phasing plans for the identified publicly funded improvements within the Specific Plan area are outlined below.

Specific Plan Approval to Three Years

- *New and Improved Parking Lots*
- *Third Street Urban Design Improvements and Plaza*
- *Upgraded Downtown Entry Features*
- *Railroad Pedestrian Crossing and Courthouse Plaza*
- *Façade and Private Signage Improvements*
- *Downtown Logo and Identity Elements*
- *Public and Directional Signage Improvements*

Three to Five Years

- *New Parking Lots and/or Parking Structures*
- *Other Streetscape Improvements for Downtown Streets*
- *Neighborhood Streets Landscaping and Urban Design Improvements*
- *Monterey Road Narrowing and Streetscape Improvements (Project Alternate)*
- *Possible Re-routing of Depot Street through the Community and Cultural Center Parking Lot to Connect with Church Street*

Six or More Years

- *New Parking Lots and/or Parking Structures*
- *North and South Monterey Road Streetscape Improvements*
- *Upper Llagas Creek Flood Control Improvements*
- *Upper Llagas Creek Landscaping and Bicycle Paths*
- *Railroad Corridor Landscaping*
- *Dunne Avenue Urban Design Improvements*

- *Grade-Separated Railroad Crossing for Pedestrians and Emergency Vehicle Access*

2.1.10 Residential Development Control System (RDCS)

The Specific Plan assumes that either an initiative ordinance placed on the ballot by the City Council to exempt development of 500 residential units within the 20-block Specific Plan project area from the RDCS process but maintain the 48,000 population cap is approved (which occurred in May 2009), and/or the City Council would continue, under the existing RDCS, to set aside a significant number of allotments for the Downtown competition. The exemption would extend through 2020. As passed by the electorate, development of 500 residential units in the Specific Plan project area are permitted without City-wide RDCS allotments[4] as described in the Plan. An exemption and/or continued RDCS set-asides for residential units within the Specific Plan project area from the RDCS process would concentrate growth downtown and reduce the number of allotments available to projects outside the Specific Plan project area.

2.2 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124 the Lead Agency must identify the purpose of the EIR and the discretionary actions required by the Lead Agency. The purpose of this EIR is stated in the project objectives below. The discretionary actions required are listed in *Section 2.3 Uses of the EIR*.

The City has identified the following basic objectives for the project:

- Increase residential density within the Specific Plan boundary, as well as on opportunity sites outside the Specific Plan Boundary to support Downtown businesses and to create a strong downtown residential neighborhood;
- Develop standards for new commercial spaces to encourage and accommodate a wide diversity of commercial uses serving the community;
- Coordinate parking strategy with realistic growth projections in order to accommodate increased parking demand;
- Create a public investment plan with partial funding for downtown public infrastructure projects from the Redevelopment Plan Amendment approved in 2005 in order to encourage redevelopment in Downtown;
- Create an active downtown through intensifying residential, retail, restaurant, and entertainment uses, within an urban setting improved with landscaping and streetscape improvements;
- Make Monterey Road and Third Street more pedestrian and retail friendly, and improve other roads with better street lighting and streetscape improvements in order to encourage residents to live, work, shop, and dine in Downtown;
- Strengthen Downtown's identity and scale with new design related to a traditional character; and create visual and physical linkages to Downtown with landscaping, bike paths and entry features, and link Downtown commercial uses to common parking areas available to the general public.

[4] New residential development proposals in the City of Morgan Hill are subject to a two-part rating system with those proposals earning the highest number of points receiving development allotments. Part 1 awards points for a proposed project's relation to and impact on local public facilities and services, while Part 2 allots additional points for such factors as the provision and design quality of parks and open space, public facilities, architectural and site features, and affordable housing units.

2.3 USES OF THE EIR

2.3.1 Overview of the Environmental Review Process

The CEQA Guidelines identify a Master EIR as an alternative to preparing a project EIR, staged EIR, or program EIR for certain projects which will form the basis for later decision making. This Master EIR is intended to identify the impacts of the Downtown Specific Plan in order to streamline the later environmental review of projects and approvals required to implement the plan. This Master EIR includes all available information with regard to the kind, size, intensity, and location of subsequent projects envisioned under the Downtown Specific Plan, per CEQA Guidelines Section 15176(b). Once the Master EIR is certified, subsequent projects consistent with the Downtown Specific Plan (including later site-specific approvals) may rely on the analysis contained in this Master EIR, per CEQA Guidelines Section 15176(d).

At the time subsequent development projects are proposed within the Downtown Specific Plan project area only limited environmental review will be required. Neither a new environmental document, such as an EIR, nor the preparation of EIR findings per CEQA Guidelines Section 15091 shall be required of a subsequent project when the Lead Agency (City of Morgan Hill) determines the following, pursuant to CEQA Guidelines Section 15177(b):

- The subsequent project was described in the Master EIR and, through the preparation of an Initial Study, is not found to cause any additional significant effect on the environment which was not previously examined in the Master EIR.
- On the basis of written findings, no additional significant environmental effect will result from the proposal, no new additional mitigation measures or alternatives may be required and the project is within the scope of the Master EIR.

In accordance with CEQA Guidelines Section 15179(b), a Master EIR that was certified more than five years prior to the filing of an application for a subsequent project described in the Master EIR may be used in accordance with this article to review such a subsequent project if the lead agency (City of Morgan Hill) reviews the adequacy of the Master EIR and either finds that no substantial changes have occurred with respect to the circumstances under which the Master EIR was certified, prepares an Initial Study and pursuant to the findings of the Initial Study certifies a subsequent or supplemental EIR that updates or revises the Master EIR, or approves a mitigated negative declaration that addresses substantial changes that have occurred.

2.3.2 Specific Uses of the Master EIR

This Master EIR will provide decision-makers in the City of Morgan Hill and the general public with relevant environmental information to use in considering the proposed project. It is proposed that this Master EIR be used for appropriate discretionary and other approvals necessary to implement the project, as proposed. These actions include, but are not limited to, the following approvals:

- Adoption of the Downtown Specific Plan
- General Plan Land Use Diagram and Text Amendments
- Modification of the General Plan Circulation Map
- Rezonings and Planned Developments
- Design Permits/Site Review, Demolition and Building Permits for Development Consistent with the Specific Plan
- Historic Alteration, Demolition, and Relocation Permits

- Development Agreements
- Streetscape Improvements, including modifications to Monterey Road
- Acquisition, redevelopment, and/or sale of property
- Development and Disposition Agreements
- Utility Infrastructure Improvements
- Construction of surface lots and structured parking

The City of Morgan Hill placed an Initiative Ordinance on the May 2009 ballot for the purpose of modifying the City's Residential Development Control System (RDCS), which limits annual residential growth within the City. The voters approved the measure, and under the exemption, projects within the 20-block Specific Plan area are not subject to the RDCS rating and allocation system; however, the number of approved and constructed units will be tracked by the City and the citywide population remains subject to the existing 48,000 population cap.

SECTION 3.0 ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION

3.1 LAND USE

3.1.1 Existing Setting

The Specific Plan project area includes the original urban core of the City of Morgan Hill. It is developed with a mixture of commercial, residential, industrial, and public/quasi-public uses (refer to Figure 11). The area within the Specific Plan boundary and Blocks 19 and 20 is currently developed with approximately 213,365 square feet of retail space, 122,248 square feet of office space, 201 dwelling units, a Community Center, the South County Courthouse (opened in April 2009), churches, and a small amount of industrial development. The Specific Plan area is mostly built out with some undeveloped and vacant parcels scattered throughout. The area contains both newer development such as the Morgan Hill Community Center and turn of the century development such as the Methodist Church (refer to *Section 3.9 Cultural Resources*). As one moves out from the Downtown Core, residential and commercial uses are lower density and more suburban in form.

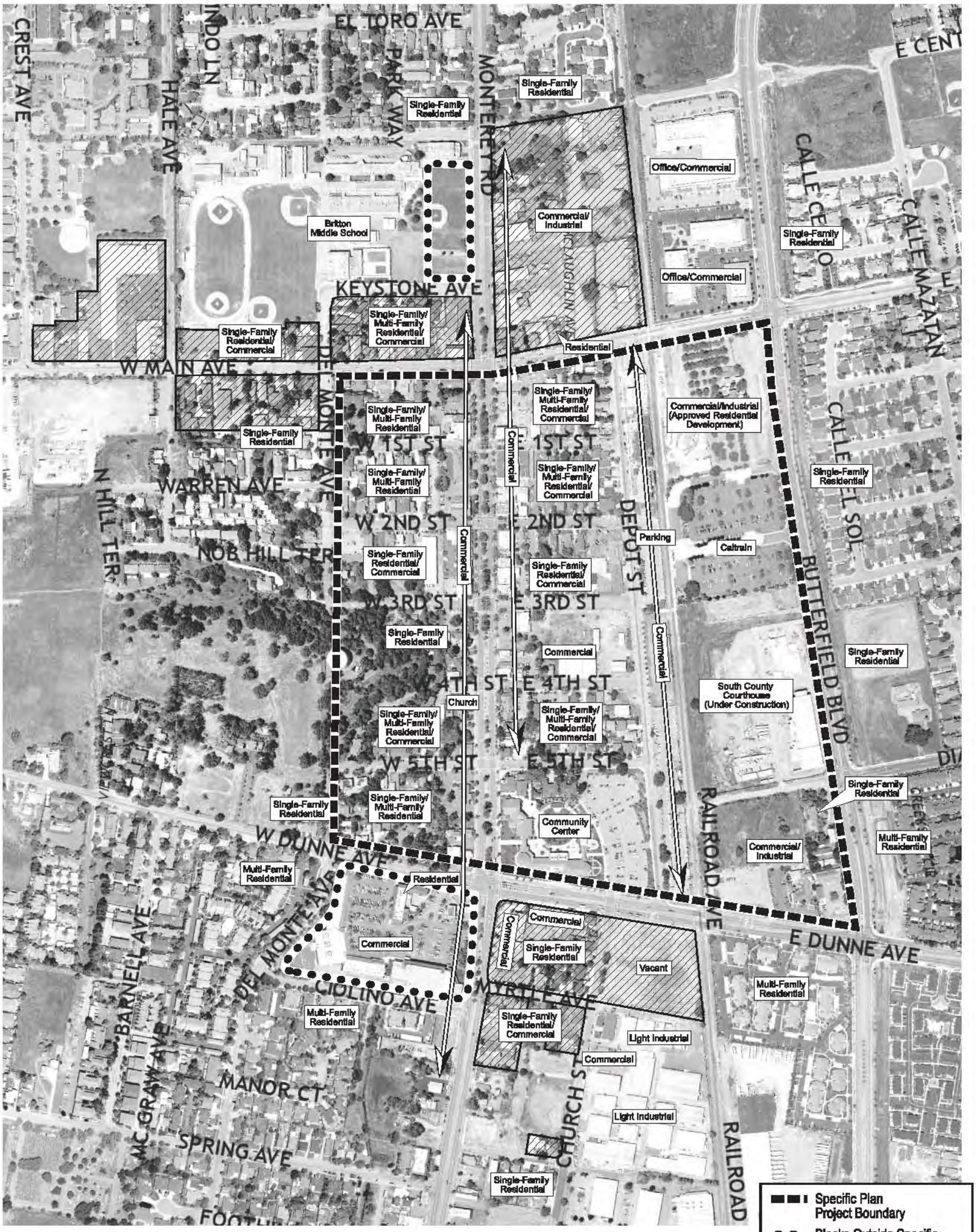
The Specific Plan project area contains two major transportation corridors; Monterey Road and the Union Pacific Railroad (UPRR) tracks. Caltrain, a commuter rail service with runs between Gilroy and San Francisco, utilizes the UPRR tracks and provides limited stop service during commute hours. The Morgan Hill Caltrain Station is located on Butterfield Boulevard between Main Avenue and Diana Avenue and has a Park and Ride Lot for commuters. The Valley Transportation Agency (Santa Clara County) and Monterey-Salinas Transit bus service also provide transit connections at the Morgan Hill Caltrain Station location.

The area is currently designated primarily for *Mixed Use* in the City's General Plan (refer to Figure 4). Other General Plan land use designations in the area include *Residential Estate* (over the hillside "Nob Hill" lands), *Multi-Family Low*, *Multi-Family High*, *Public Facilities*, *Commercial*, and *Industrial*, and *Office Industrial*. The existing zoning districts in the Specific Plan project area are consistent with the General Plan land use designations and also include *Planned Unit Developments* and *Residential Planned Developments* interspersed throughout the area.

The Specific Plan area does not contain agricultural land of any type. The project site is also not located within two miles of a public airport.

3.1.1.1 *Surrounding Land Uses*

Properties surrounding the Specific Plan project area include a similar variety of land uses including residential, commercial, industrial and public facilities (refer to Figure 11). Residential development of varying densities are located primarily east and west of the project area while mixed commercial and office land uses and industrial land uses are located north and south of the Specific Plan project area.



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 11

3.1.1.2 *Development Constraints*

The Specific Plan project area is urban in character with a mix of commercial, industrial, residential, and public uses. Physical conditions in or adjacent to the project area that may affect its suitability for the proposed development include the following:

- The presence of loud noise sources, including automobile and truck traffic on adjacent roadways and trains on the UPRR tracks.
- Geologic hazards related to Nob Hill in the west and West Little Llagas Creek.
- Flooding related to West Little Llagas Creek.
- Hazardous materials contamination.
- Presence of historic buildings and archaeological resources in the area.

Noise from adjacent roadways and trains is discussed in *Section 3.3 Noise and Vibration*. Geologic hazards are discussed in *Section 3.5 Geology and Soils*. Flooding is discussed in *Section 3.6 Hydrology and Water Quality*. Hazardous materials contamination is discussed in *Section 3.7 Hazards and Hazardous Materials*. Cultural resources, such as historic buildings and archaeological resources, are discussed in *Section 3.9 Cultural Resources*.

3.1.1.3 *Applicable Morgan Hill Policies and Standards*

Various City policies and standards included in the General Plan (GP), Municipal Code (MHMC), Zoning Ordinance, and Building Code have been adopted for the purpose of avoiding or mitigating land use impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the following development policies and standards:

- *GP Incompatible Uses Policy 6b* – Cluster Residential Development to Provide Buffers
- *GP Incompatible Uses Action 6.1* – Use Setbacks and Barriers Between Incompatible Uses
- *GP Downtown Policy 13f* – Encourage Industrial Uses to Move From Downtown
- *GP Downtown Policy 13g* – Encourage Residential Uses Above Downtown Commercial Uses
- *MHMC Chapter 8.28 Noise*
- *MHMC Chapter 18.42 Flood Damage Prevention*
- *MHMC Chapter 18.43 Seismic Combining District*
- *MHMC Chapter 18.44 Hillside Combining District*
- *MHMC Chapter 18.45 Geologic Combining District*
- *MHMC Chapter 18.48 Performance Standards*
- *MHMC Chapter 18.74 Design Review*
- *MHMC Chapter 18.75 Historical Resources*

3.1.2 Land Use Impacts

3.1.2.1 *Thresholds of Significance*

For the purposes of this EIR, a land use impact is considered significant if the project would do any of the following:

- Physically divide an established community; or
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal

program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

- Cast shadow(s) that substantially limits the beneficial use of a public or quasi-public park, garden, or open space; or casts shadows on a historic resource, such that it would substantially diminish or impair its eligibility for listing in the National Register of Historic Places, California Register of Historical Resources, or in a local register of historical resources survey as defined by the Public Resources Code.

3.1.2.2 *Land Use Conflicts*

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of land use compatibility. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and annoyance to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts from the proposed "project", in this case a Specific Plan and the projects which are consistent with and implement the plan, upon persons and the physical environment, and potential impacts from the project's surroundings upon the project itself.

Some commercial and industrial activities may generate complaints or be considered unacceptable by nearby residents in settings where there is a mix of land uses. Examples include early morning or late evening operations at loading docks, spillover of amplified music, and noise from outdoor dining areas. Other characteristics which could impact residents can include the presence of dust, litter, unsightly garbage storage, outdoor lighting, and large air conditioning or mechanical units. The new land use designations proposed under the Specific Plan call for taller buildings (up to four stories, and perhaps higher through a Planned Development rezoning) in the Downtown Core/CBD zone with minimal setbacks from the side and rear property lines. Taller buildings may have views of residences and residential open space (i.e., backyards) from multiple windows. The degree to which a busy downtown's activities are considered "significant" or "unacceptable" are usually influenced by expectations. Noise, lighting, vehicular movements and outdoor human activities, that would be considered intrusive or annoying in a quiet suburban single-family neighborhood, are expected by residents that want to live in a lively urban center. To some degree, the new residents of high density housing downtown will anticipate the higher intensity atmosphere. There also can be conflicts between residential and commercial driveways and operations when they are in close proximity.

The Specific Plan includes the following design guidelines that would limit potential conflicts between commercial uses (including restaurants) and nearby residences, specifically those associated with litter, unsightly garbage storage, lighting and noise:

DG-K1. **Construct service areas away from public view.** Trash disposal areas shall be screened from public views from all sidewalks, streets, plazas, and public spaces. Trash enclosures shall be used to store outdoor garbage containers or dumpsters. Trash disposal areas and shipping and receiving areas shall not be permitted along the street frontage.

DG-K2. **Design compatible trash enclosures.** The design of trash enclosures should use similar forms, materials, and colors.

DG-L1. **Construct service areas away from public view.** This guideline also calls for the minimization of noise levels of mechanical equipment.

DG-O2. **Design lighting to illuminate only the intended areas.** Site, building, and sign lighting shall be located and directed to light the intended area of illumination and to prevent off-site glare impacts on adjacent buildings or properties.

In addition, new development will be required to undergo design review by the City of Morgan Hill Community Development Director or designated staff (and/or the Planning Commission or City Council upon referral or appeal) prior to issuance of a Site Development Permit or Design Permit. Under the City of Morgan Hill Municipal Code (Section 18.74.090), the design permit application shall only be approved if it is found that the application is consistent with the General Plan and zoning for the property as well as the provisions of Chapter 18.74, and substantially conforms with applicable design standards and guidelines within the Design Review Handbook. All actions of the Community Development Director shall be final, unless referred or appealed to the Planning Commission or City Council. Upon appeal, further action by the Planning Commission and City Council shall be required pursuant to the Zoning Ordinance.

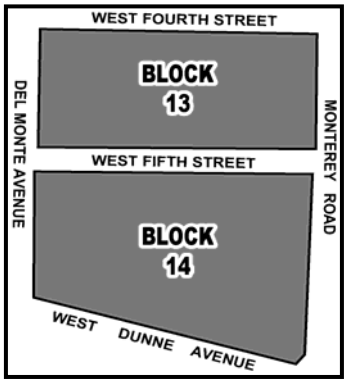
A Conditional Use Permit would be required for any entertainment use in the *Central Business District* that is not ancillary to a restaurant. Entertainment permits would be required from the Chief of Police for any establishment providing entertainment or dancing in conjunction with the selling of food and/or alcoholic beverages. The permittee would be responsible to preserve the peace and maintain order within and immediately adjacent to the premises upon which the entertainment permit has been granted and to comply with all conditions specified in the permit (Morgan Hill Municipal Code Chapter 5.28). Noise from outdoor eating areas would be restricted to 45 dBA at the property line after 10 p.m. (Morgan Hill Municipal Code Chapter 18.24).

Impacts from the Proposed Project

The proposed Specific Plan would amend the General Plan land use designations on 21 parcels on Blocks 13 and 14. The Specific Plan would also amend the General Plan land use designations on Blocks 16, 19, and 20 (refer to Figure 4). The zoning districts in the Specific Plan area would also be amended consistent with the proposed General Plan land use designations (refer to Figure 5).

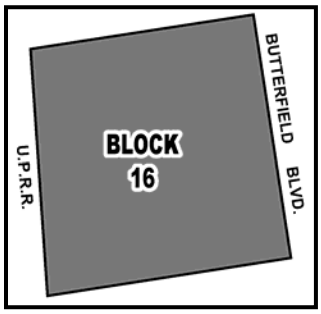
As described, the project includes a series of General Plan amendments and rezonings that would modify future development throughout the project area. The existing types of development as well as the existing and proposed zoning in the Specific Plan project area are shown in Table 3.1-1. The extent to which these changes could result in land use compatibility impacts compared to existing conditions is discussed below. Impacts from the proposed land uses are also compared to the impacts likely to occur from redevelopment under the existing designation where that is different from existing development.

R2 to D-R3 Rezonings (Westerly Portion of Blocks 13 and 14)

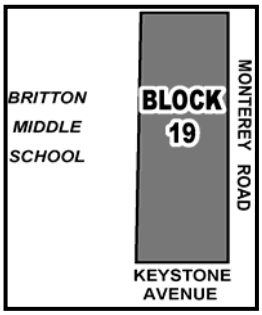


Current development on these blocks consists of single-family detached residential, multi-family residential, commercial, office, and public facility uses. Under existing conditions, the single-family residences and apartments on these blocks could be redeveloped with newer single-family detached and attached residences, duplexes, and apartments or condominiums. The allowed land uses proposed by the Specific Plan in this area would not substantially change on any parcel such that it would impact adjacent development more than development under the current land use designation and zoning. The existing zoning district R2 and proposed D-R3 zoning district restrict maximum building heights to 30 feet and 35 feet, respectively. The D-R3 district allows for a reduced front setback but requires the same rear and side setbacks, as the R2 district. Building coverage would be allowed to increase by 25 percent under the D-R3 zoning district allowing more building coverage and less landscaping on individual parcels. The rear setback for the D-R3 zone is the same as in the R2 zone. New developments would be subject to design review to ensure that lighting, trash collection areas, and building design would be compatible with adjacent existing residential or commercial development. Implementation of the development standards and design review included in the Specific Plan would avoid possible land use compatibility impacts associated with the proposed change from R2 to D-R3 zoning at these locations.

Public Facilities (PF) to D-R4/PD Zoning and CC-R Rezonings (Blocks 16 and 19)

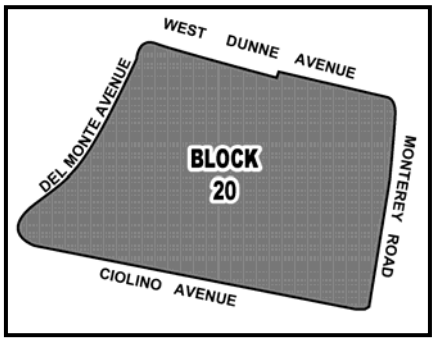


The existing VTA/Caltrain parking lot on Block 16 could be replaced with a parking structure or another public use such as an educational facility or community center under its existing PF zone district, but is unlikely to be redeveloped. Under the proposed Specific Plan, Block 16 would be rezoned from *Public Facilities* to *Downtown High-Density Residential* (D-R4)/*Planned Development overlay* (PD). This site is envisioned to provide high-density residential development as well as shared parking for residents and Caltrain riders. Residential development allowed on this site would be generally compatible with both the approved high density residential development on Block 15 and the South County Courthouse on Block 17, given that the courthouse building is not a sensitive or incompatible use and is set back approximately 200 feet from the Block 16 property line; adequate space (a six acre parcel) exists to ensure an appropriate site design for future development.



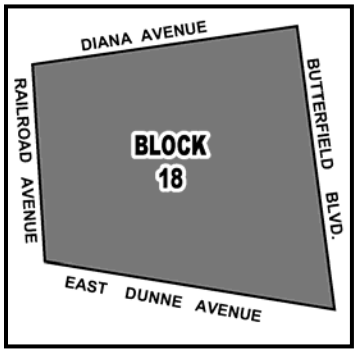
Block 19, located on 2.1 acres of Britton Middle School grounds currently developed with ball fields and tennis courts would be rezoned from *Public Facilities* to *Central/Commercial Residential District*. This block is anticipated to be developed with a mixed-use development of 25,000 square feet of office space and 27 dwelling units. With the planned setbacks and design review measures included in the Specific Plan for screening of trash enclosures, the anticipated development of office and residential uses would not conflict with the existing school facilities on this site. Redevelopment of Block 19 would result in the loss of tennis courts and ball fields on the school site. The impacts on school and recreational facilities from redevelopment on Block 19 are discussed in *Section 3.13 Public Facilities and Services.*

Planned Unit Development to R3 and CC-R Rezoning (Block 20)



This block presently contains a single-story suburban shopping center with a large surface parking lot, an eight-unit apartment building and a gas station. Block 20 also includes a Santa Clara Valley Water District (SCVWD) easement through the site that follows the underground West Little Llagas Creek. Development anticipated on this site would include residential uses west of the SCVWD easement and mixed use development east of the easement. Medium-density residential development is located north, south and west of this block. Monterey Road is located east of this block. Redevelopment of these properties would likely result in single-family attached dwellings, multi-family dwellings and a mixed-use building with ground floor commercial space and residential development on the upper floors. With the separation of mixed use development from existing single-family residences, planned setbacks and design review measures included in the project, the proposed rezonings are not anticipated to result in land use conflicts with surrounding development. Due to uncertainty about whether and when this property would actually be redeveloped in accordance with the new zoning, for the purposes of this EIR, the "worst case" situations were analyzed for traffic and water impacts: the traffic modeling assumes that the existing 90,000 square foot shopping center traffic and eight units are retained and the water assessment assumes that 90 residential units and 17,000 square feet of commercial uses are developed.

Planned Unit Development to D-R3, General Commercial (CG), and Administrative Office (CO) (Block 18)



Block 18 is currently zoned Planned Unit Development and developed with commercial and single-family residential uses. Under the Specific Plan, residential development is assumed to occur on the western portion of the block proposed for R-3 zoning (80 allotments have already been obtained for this site under existing zoning and discretionary permits are in process). The existing restaurant remains on the parcel proposed for CG zoning, and the existing plumbing business and residential uses could either remain or transition to office uses under the proposed CO zoning for the eastern portion of the block. The City of Morgan Hill Design Review process under Chapter 18.74 would be required for future development in the Specific Plan project area to ensure compatibility between existing and proposed development. Medium-density residential and commercial uses are generally considered by the City to be compatible and; therefore, these land uses would not result in significant land use compatibility impacts.

CC-R to Central Business District (All or Portions of Blocks 1-14)

Most of the Downtown Core area would be rezoned from CC-R to *Central Business District* (CBD) (refer to Figure 5). Existing commercial, retail, office, single-family residential, and apartment uses are scattered throughout the Downtown area where the *Central Business District* is proposed. The CBD standards allow for reduced setbacks compared to those of the CC-R district where future development would be constructed adjacent to existing residential uses. For example, the minimum rear setback for residential uses would be reduced from 20 feet to 10 feet. It also means that new buildings could be built closer to remaining residences in the project area. This would allow for increased residential densities and additional commercial uses serving the Downtown.

As noted previously, future projects in the downtown will undergo design review for consistency with the Specific Plan design guidelines as well as the city-wide design guidelines. Review of projects for consistency with community standards, including at the interface of new development and existing residential uses, is anticipated to avoid significant land use compatibility impacts associated with visual intrusion and conflicts with outdoor activity areas, such as trash enclosures. Outdoor dining areas are assumed to be at the front of new mixed use development, along street frontages.

The City of Morgan Hill design review process would be required for future development in the Specific Plan area to ensure compatibility between existing and proposed development. Given the current mix of land uses in the Specific Plan project area, with site and architectural review, development proposed under the Specific Plan is not anticipated to result in significant land use compatibility impacts.

R4 High-Density Residential (Block 15)

Block 15 of the Specific Plan is currently developed with a concrete batch plant adjacent to the UPRR tracks and a single-family residential property that was the former site of the Morgan Hill Flea Market. This block was approved for redevelopment with 134 multi-family residential units, of which 99 have RDCS allotments, in 2007. No revisions to the existing approvals are anticipated with implementation of the Downtown Specific Plan.

CC-R Density Change (North, South, and West of Downtown Core)

Densities would be increased by two dwelling units per acre on parcels with a *Mixed Use* land use designation in the General Plan and zoning of *Central Commercial/Residential District* (CC-R) as a result of the Specific Plan. The increase of two residential units per acre in the CC-R district would not result in a perceptible difference in the quantity of development in the Specific Plan project area or have any increased impact on adjacent land uses.

Impact LU-1: The Specific Plan proposes mixed-use residential, commercial, and office development in an area currently developed with a mix of land uses. Land use conflicts between proposed new residential, commercial, or mixed-use development and existing residential uses can be minimized through conformance with the design guidelines in the Specific Plan and compliance with the design review process of Chapter 18.74 of the Municipal Code. **(Less Than Significant Impact)**

Shade and Shadow Impacts

Shade and shadow impacts occur when a structure or other obstruction reduces access to natural sunlight. In an urban environment, virtually all land uses are subject to shading from adjacent properties to some extent. Even in residential neighborhoods two-story homes may shade neighboring properties. During summer, shading may even be desirable. Shade and shadow impacts typically occur when a building or other structure substantially reduces access to natural sunlight, measured midday on the first day of winter and on the two equinoxes.[5] The significance of these impacts is then compared to the threshold identified in *Section 3.1.2.1* of this EIR.

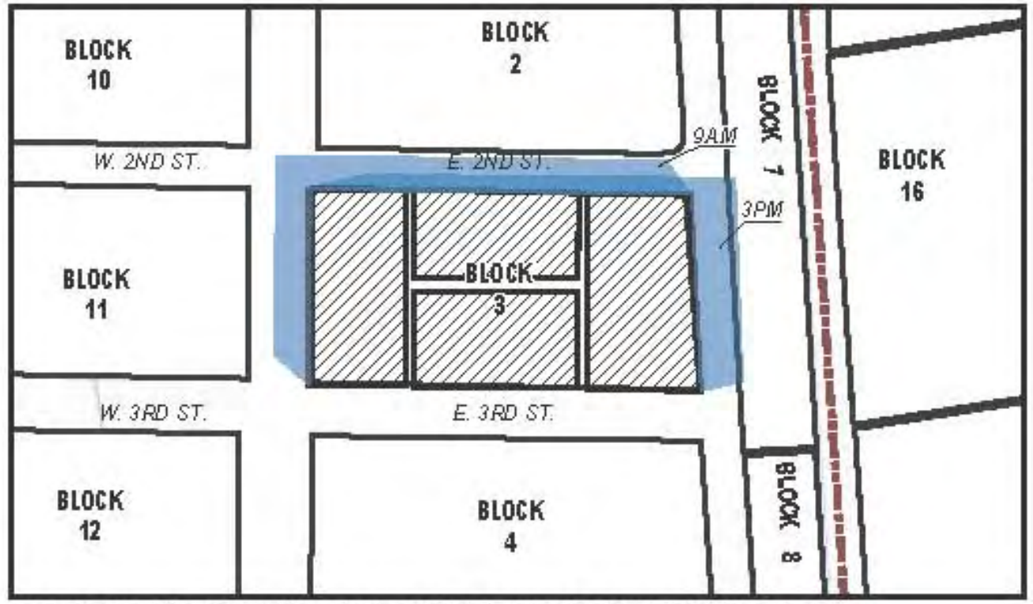
[5] On the first day of winter, the sun is lowest in the sky and shading is greatest. On both the vernal and autumnal equinoxes, the sun is at the same location, over the equator. This threshold evaluates shading from September 21 through March 21 from 9am to 3pm.

Shadow sensitive land uses, such as parks, community facilities, and historic resources within the Specific Plan boundaries and adjacent blocks were identified based upon a visual reconnaissance and review of aerial photographs. These uses are located on Blocks 2, 5, 6, 9, 10, 12, 13, 14, and 19. Development allowed in the *Central Business District* would increase building heights in the Specific Plan project area compared with existing regulations and existing development. The basic height limit within the CBD district would allow three-story development to be up to 45 feet to the roof plate. For sites of 22,000 square feet (approximately one-half acre) or more, the base height limit would increase to four stories or up to 55 feet to the roof plate. Heights could be greater, most likely not exceeding 90 feet (due to fire suppression constraints) if a Planned Development rezoning was approved by the City. Any portion of a structure greater than three stories would be required to step back to provide a human scale. The most likely sites for four-story buildings (and possibly greater) would be focused at the easterly portions of Blocks 3 and 4, and the Caltrain parking lot on Block 16. Increased development that occurs in the project area would have the greatest potential to shade historic buildings and public open space where it occurs adjacent to these uses. Representative shadows from a 45-foot tall building and 55-foot tall building are shown in Figure 12.

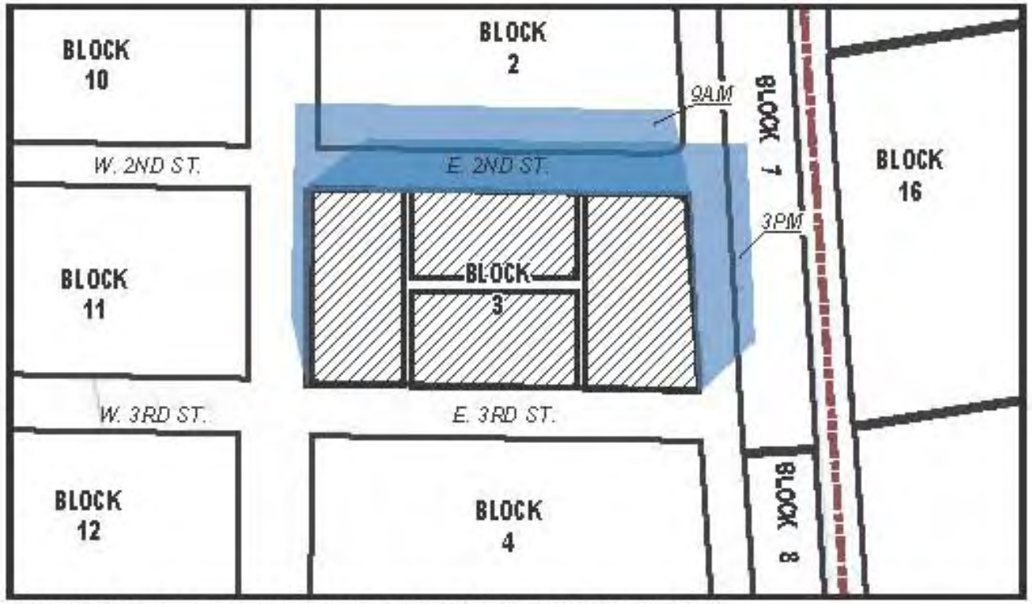
Redevelopment within the *Central Business District* could cast shadows at midday of approximately 42 to 193 feet during the Fall through Spring if constructed to the maximum height allowed (55 feet and assuming no stepback). Shadows from a 45 foot structure at midday would range from 34 to 158 feet during the Fall through Spring. Shadows would be cast to the northwest during the morning and to the northeast during the afternoon.

The outdoor activity areas of the Morgan Hill Community and Cultural Center are generally south of the *Central Business District* and activities are not anticipated to be affected or impaired by substantial new shadows. Shading from a three-story parking structure in the location of the existing Community and Cultural Center parking lot would be shorter than shown in Figure 12 for a 45-foot structure and would not impact activities on this site. Development on Block 19 would shade the small remaining field areas directly adjacent to this block during mornings from September to March. The Britton Middle School site includes substantial field areas on the southern and western portion of the school site that would be unaffected by shadows from development of Block 19. There is no other existing community facility or park space in the Specific Plan project area that would be impacted by shading.

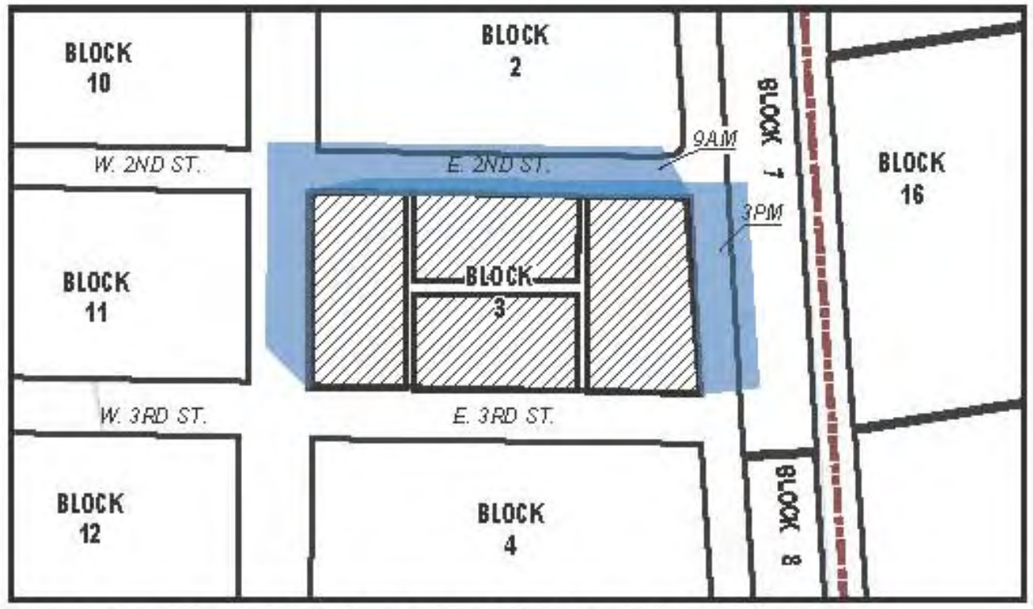
The Methodist Church on Block 13 is the only historic resource in the Specific Plan project area that is eligible for the National Register of Historic Places and California Register of Historical Resources (refer to *Section 3.9 Cultural Resources*). The adjacent parcel to the south with the greatest potential to cast shadows on this resource is not of sufficient size (22,000 sf) to be developed with a four-story structure and due to the presence of West Little Llagas Creek it is unlikely to be combined with other adjacent parcels that would allow the development of a structure taller than three-stories. Any development proposed on the site under current conditions could also be built to three stories. This historic resource could be partially shaded during midday from September to March and would experience the greatest shading during Winter mornings. The buildings on this property would not be shaded to the extent that the significance of this resource would be diminished. The City of



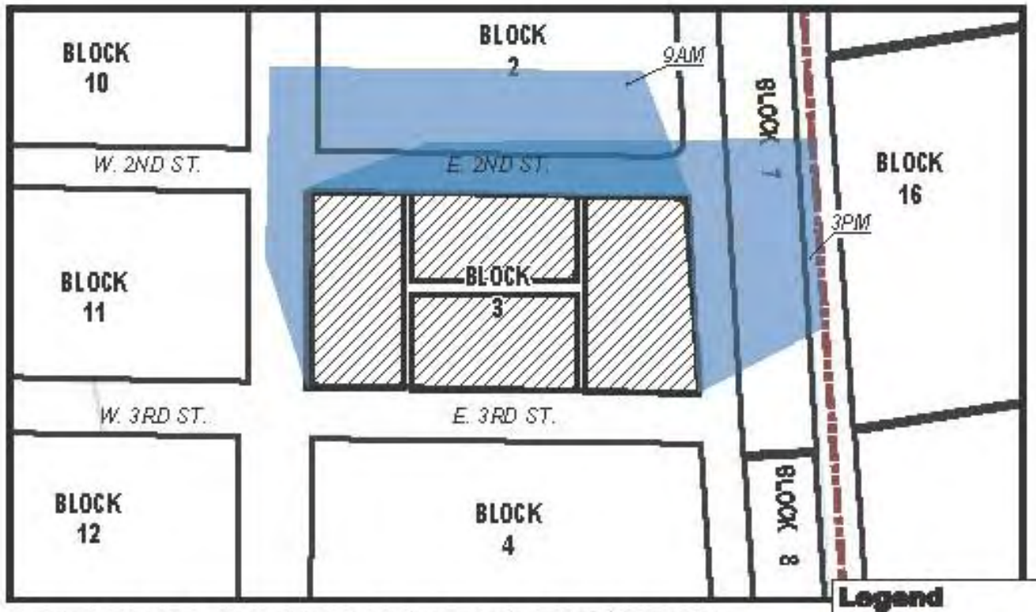
SPRING AND FALL EQUINOXES - 45 FOOT SHADE AND SHADOW (3 STORY BUILDING)



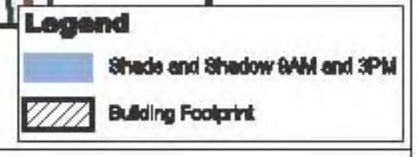
WINTER SOLSTICE - 45 FOOT SHADE AND SHADOW (3 STORY BUILDING)



SPRING AND FALL EQUINOXES - 55 FOOT SHADE AND SHADOW (4 STORY BUILDING)



WINTER SOLSTICE - 55 FOOT SHADE AND SHADOW (4 STORY BUILDING)



REPRESENTATIVE SHADE AND SHADOW FOR EQUINOXES AND WINTER SOLSTICE

FIGURE 12

Morgan Hill design review process would be carried out to review future development adjacent to this resource to ensure no other impact to its significance occurs. Any proposed development that affects the historic significance of this resource is not covered by this EIR.

Other locally historic buildings such as the Votaw Building on Block 2 would be shaded during the winter months from redevelopment of Block 3 with a 55-foot tall building. The historic Mason & Triggs building on Block 10 would also be shaded during Winter mornings from redevelopment of Block 11 with a 55-foot tall building. Buildings likely to shade these resources would be located across Second Street which would provide a buffer and reduce the amount of time the buildings are shaded. The shading of these structures would not impede their current use or diminish their historic significance as they have no courtyards, gardens, or other light affected features. In addition, the Grange Hall on Block 5 would be mostly shaded during Winter afternoons and partially shaded during Fall and Spring afternoons with the construction of 45-foot or 55-foot tall buildings on Monterey Road. The Grange Hall is currently buffered from adjacent commercial properties by a row of landscape trees. The shading of this resource from redevelopment of adjacent commercial properties would only occur in the afternoons and is not anticipated to substantially diminish the historic significance of the resource since no outdoor activity areas are present on the site that contribute to its significance. The locally historic McCreery House property on West Fourth Street (Block 12) would also be partially shaded in the morning from September to March. The residence is currently substantially shaded by vegetation and is located at the base of Nob Hill which would shade the property in the afternoon. Shadows would only partially shade this property and the building is already substantially shaded, therefore, it is not anticipated that additional shading would affect the historic significance of this resource.

Impact LU-2: Redevelopment allowed under the Specific Plan would not result in substantial shading that would adversely affect historic resources or public open space. **(Less Than Significant Impact)**

Impacts to the Proposed Project

Proximity to Major Transit Corridors

One of the reasons the increased density of development is proposed under the Specific Plan is the proximity of the downtown area to the existing Caltrain station. As a result, residential development proposed near the UPRR tracks would be subject to elevated noise levels and vibration. These issues are discussed in detail in *Section 3.3 Noise and Vibration*. Multi-family development proposed in the vicinity of the UPRR tracks would require noise attenuation measures to reduce interior noise levels to acceptable levels, as required by state law and Morgan Hill General Plan policies.

The design of the new development would encourage transit use and interactions with the downtown neighborhood. The proposed design of future development would take into account the presence of urban activities. All future development proposed under the Specific Plan would require approval of a Design Permit as set forth in Chapter 18.74 of the Zoning Ordinance, and this design review process would ensure consistency with City ordinances and policies.

Proximity to Britton Middle School

Block 19, an area north of the Downtown proposed to be rezoned to *Central/Commercial Residential District* is located adjacent to Britton Middle School. This block is anticipated to be developed with a mixed-use development of approximately 25,000 square feet of office space and 27 dwelling units.

Noise from playground activities could be a nuisance for some future residents; however, schools and residences are normally considered compatible land uses. In addition, most of the noise generation occurs during the day and would not result in nighttime sleep disturbance. Implementation of the proposed rezoning of Block 19, therefore, would not result in a significant land use compatibility impact.

Proximity to Industrial Uses

Existing industrial uses are located primarily on Blocks 8, 15, and 18. Block 8 is currently developed with a warehouse and lumber yard which is separated from existing residential uses by Depot Street. The existing industrial properties on Block 15 are currently zoned *High-Density Residential (R4)* which would allow multi-family residential uses on all or a portion of this block. The existing concrete batch plant may remain when redevelopment of the easternmost portion of this site with residential uses is complete. New residential uses on Block 15 may experience interim land use conflicts, such as annoyance from truck traffic, dust, and noise as long as the concrete batch plant remains in place. The concrete batch plant is a legal non-conforming use under the City of Morgan Hill Zoning Ordinance and no additional setbacks or screening would be required at this facility. New residential uses, however, may elect to install walls or orient residences away from industrial activity areas; however, there may be limited opportunity to reorient planned residences or install walls on Block 15. Interim land use conflicts on Block 15 could occur with or without implementation of the proposed Specific Plan.

Block 18 is proposed to be rezoned from *Planned Unit Development* to *Medium-Density Residential (R3), General Commercial (CG), and Administrative Office (CO).* This would allow the current commercial development to remain on-site with the addition of residential uses. This block is expected to transition to these uses in the future. Interim land use conflicts between existing uses and new residential development are anticipated to be related to noise from truck traffic and other activities during early morning hours.

With the exception of the concrete batch plant, noise and activity levels on these relatively small, isolated industrial properties are limited compared to other industrial locations in Morgan Hill. For these reasons, the project is not anticipated to result in long-term land use conflicts between activities at existing industrial uses and future residential uses in the Downtown.

Future Fire Station Block 17

A fire station was identified as necessary in the vicinity of Dunne Avenue and Butterfield Boulevard as part of the Fire and Medical Services Master Plan Update (2002). The fire station will be constructed on Block 17 as operational funding becomes available. The facility will serve the local area including the Specific Plan project area. The ingress and egress of fire trucks and the operation of sirens, while not constituting a significant noise impact, could potentially annoy or result in nuisance complaints by nearby residents. Locally serving public safety uses are, however, considered compatible throughout the City with residential and other land uses, and with the proposed mixed use development in the Specific Plan project area.

Impact LU-3: Land use conflicts between proposed new residential development and the existing noise generating rail corridor can be minimized through conformance with state law, General Plan guidelines, and the Specific Plan design standards. **(Less Than Significant Impact)**

3.1.3 Conclusion

Impact LU-1:	The Specific Plan proposes mixed-use residential, commercial, and office development in an area currently developed with a mix of land uses. Land use conflicts between proposed new residential, commercial, or mixed-use development and existing residential uses can be minimized through conformance with the design guidelines in the Specific Plan and compliance with the design review process of Chapter 18.74 of the Municipal Code.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact LU-2:	Redevelopment allowed under the Specific Plan would not result in substantial shading that would adversely affect historic resources or public open space.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact LU-3:	Land use conflicts between proposed new residential development and the existing noise generating rail corridor can be minimized through conformance with state law, General Plan guidelines, and the Specific Plan design standards.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.2 TRANSPORTATION

The discussion in this section is based on a Transportation Impact Analysis prepared by *Fehr & Peers* in July 2009. A copy of this report is included as Appendix C in this EIR.

3.2.1 Existing Setting

3.2.1.1 *Existing Roadway Network*

The Specific Plan project area and surrounding regional and local roadway network are described below and shown on Figure 13.

Regional Access

U.S. Highway 101 (US 101) is a north-south freeway that serves as the primary roadway connection between Morgan Hill and other areas of Santa Clara County to the north and south. US 101 extends north to San Francisco and south to Los Angeles. The freeway includes six lanes (three mixed-flow lanes in each direction) within most of Morgan Hill. North of Cochrane Road, US 101 widens to eight lanes with three mixed-flow lanes and one high occupancy vehicle (HOV) lane in each direction. The Dunne Avenue interchange provides primary access to the downtown area.

Local Access

Monterey Road is generally a four-lane arterial roadway through Morgan Hill, with separate left-turn lanes at intersections and on-street parking in some areas. The section of Monterey Road between Wright Avenue and Cochrane Road only includes two northbound lanes and one southbound lane. Between Main Avenue and Wright Avenue and south of Dunne Avenue through the City a continuous center lane is provided between intersections for left turns. Monterey Road is the main north-south roadway through Downtown Morgan Hill.

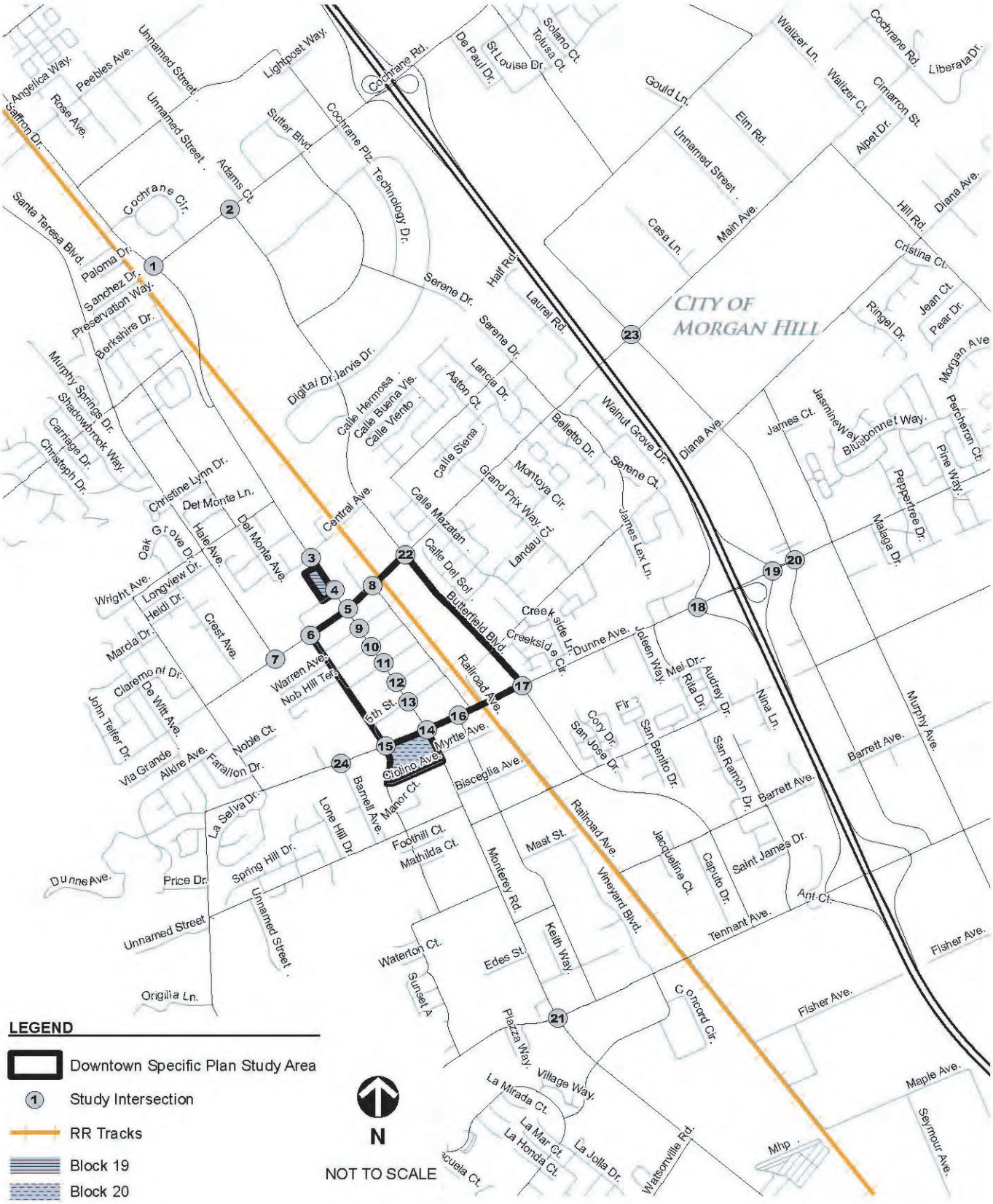
Main Avenue is a two-lane roadway that extends east from Hale Avenue to Hill Road on the east side of the City. Main Avenue forms the northern boundary of the downtown area.

Dunne Avenue is a four-lane, divided arterial that extends eastward from Monterey Road through a partial-cloverleaf interchange at US 101 and up into the eastern foothills. West of Monterey Road, Dunne Avenue narrows to a two-lane undivided roadway and extends westward past the intersection of Peak Avenue and up into the western foothills. Dunne Avenue forms the southern boundary of the downtown area.

Butterfield Boulevard is a four-lane, divided arterial that extends northward from Tennant Avenue to Cochrane Road. Butterfield Boulevard forms the eastern boundary of the downtown area and is a primary north-south roadway within the City.

Depot Street is a two-lane, north-south roadway east of Monterey Road that extends south from Main Avenue to Dunne Avenue.

Del Monte Avenue is a two-lane, north-south roadway west of Monterey Road. It forms the western boundary of the downtown area.



EXISTING ROADWAY NETWORK AND STUDY INTERSECTIONS FIGURE 13

Central Avenue is a two-lane, east-west roadway north of Main Avenue. This street extends through Morgan Hill in two segments. The segment closest to the downtown extends east from Del Monte Avenue to the railroad tracks providing access to Britton Middle School. The second segment extends from east of the railroad tracks to Serene Drive.

Condit Road is two-lane, north-south roadway located east of US 101. This street extends through Morgan Hill, from Half Road in the north to Tennant Avenue in the south.

First Street is a two-lane, east-west roadway located south of Main Avenue. This street extends east from Del Monte Avenue to Monterey Road and continues east to Depot Street. At the intersection of First Street and Monterey Road, a center landscaped median prevents eastbound and westbound through traffic.

Second Street is a two-lane, east-west roadway located south of First Street. This street extends east from Del Monte Avenue to Monterey Road and continues east to Depot Street, where access to the Caltrain Station and parking area is provided.

Third Street is a two-lane, east-west roadway located south of Second Street. This street extends east from Del Monte Avenue to Monterey Road and continues east to Depot Street, where access to the Caltrain Station and parking area is provided. At the intersection of Third Street and Monterey Road, two sets of speed cushions slow northbound and southbound traffic. This intersection has a center landscaped median preventing eastbound and westbound through traffic on Third Street.

Fourth Street is a two lane, east-west roadway located south of Third Street. Fourth Street extends from west of Monterey Road to Depot Street. West of Monterey Road, Fourth Street provides access to several different commercial businesses.

Fifth Street is a two-lane east-west roadway that extends between Depot Street and Del Monte Avenue. Fifth Street, west of Monterey Road, turns south and becomes Del Monte Avenue.

3.2.1.2 *Existing Pedestrian and Bicycle Facilities*

Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Sidewalks are provided on both sides of Monterey Road. Crosswalks are present at all of the intersections on Monterey Road between Main Avenue and Dunne Avenue.

Bicycle facilities comprise paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only. Bicycle lanes are provided on Main Avenue, on Dunne Avenue east of Monterey Road, and on Monterey Road except through the downtown. Within the Downtown area, Monterey Road (between Main Avenue and Dunne Avenue), Depot Street, and Fifth Street are designated bicycle routes. In the surrounding area, Del Monte Avenue south of Fifth Street and Ciolino Avenue between Del Monte Avenue and Monterey Road are designated bicycle routes. Figure 14 presents existing bicycle facilities in the vicinity of the Specific Plan project area.

EXISTING BICYCLE FACILITIES

FIGURE 14

3.2.1.3 *Existing Transit Service*

The Santa Clara Valley Transportation Authority (VTA) operates bus service in all jurisdictions within Santa Clara County. Caltrain, a heavy rail commuter service, is operated by the Peninsula Joint Powers Authority, consisting of representatives from the City and County of San Francisco, the San Mateo County Transit District, and VTA. Figure 15 shows the existing transit service in the vicinity of the Specific Plan project area.

Route 15 is a local community bus that provides service between the Morgan Hill Civic Center and Saddleback Drive and offers peak-period trips to Jackson Oaks and the Morgan Hill Caltrain station. Midday trips are provided to the Centennial Recreation Center. In downtown, this route operates along Main Avenue, Butterfield Boulevard and Dunne Avenue. Service operates on weekdays only, every 60 minutes from 6:05 AM to 7:00 PM.

Route 16 is a local community bus that provides service between the Morgan Hill Civic Center and Burnett Avenue. In downtown, it operates along Main Avenue. Service operates on weekdays only, every 60 minutes from 6:30 AM to 5:50 PM.

Route 68 is a regional bus route that provides service between the City of Gilroy and the San José Diridon Caltrain Station. In downtown, it operates along Monterey Road and Main Avenue. Service operates on weekdays every 15 to 30 minutes from 4:20 AM to 1:20 AM and on weekends every 30 to 60 minutes from 5:50 AM to 1:15 AM.

Route 121 is an express bus route that provides service between the City of Gilroy and the Lockheed Martin Light Rail Station in Sunnyvale. In downtown, it operates along Butterfield Boulevard and Dunne Avenue. This route services the Morgan Hill Caltrain station. Service operates on weekdays only, every 30 to 60 minutes from 4:30 AM to 8:45 AM and 2:50 PM to 7:40 PM.

Route 168 is an express bus route that provides direct service between the Gilroy, Morgan Hill and the San Jose Diridon Transit Centers. In downtown, it operates along Butterfield Boulevard and Dunne Avenue. Service operates on weekdays only, every 25 to 40 minutes from 5:40 AM to 9:30 AM and 3:30 PM to 7:15 PM.

Caltrain provides frequent daily train service between San Jose and San Francisco. Service extends south to Gilroy during commute periods, with three northbound trips during the AM peak period and three southbound trips during the PM peak period stopping at the Morgan Hill Caltrain Station. Connections to VTA Bus Route 15 and Route 121 can be made at this station.

EXISTING TRANSIT FACILITIES FIGURE 15

3.2.1.4 *Existing Roadway Conditions*

Study Intersections

An analysis of AM and PM peak hour traffic conditions was completed for 24 intersections, including 13 signalized intersections, 10 unsignalized intersections, and one future signalized intersection. The intersection operations were evaluated following the guidelines of the City of Morgan Hill and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The analysis evaluated the operations of the following 24 study intersections as shown on Figure 13:

1. Monterey Road / Cochrane Road
2. Butterfield Boulevard / Cochrane Road
3. Monterey Road / Central Avenue (unsignalized)
4. Monterey Road / Keystone Avenue (unsignalized)
5. Monterey Road / Main Avenue
6. Del Monte Avenue / Main Avenue (unsignalized)
7. Hale Avenue / Main Avenue (unsignalized)
8. Depot Street / Main Avenue (unsignalized)
9. Monterey Road / 1st Street (unsignalized)
10. Monterey Road / 2nd Street
11. Monterey Road / 3rd Street (unsignalized)
12. Monterey Road / 4th Street (unsignalized)
13. Monterey Road / 5th Street (unsignalized)
14. Monterey Road / Dunne Avenue
15. Del Monte Avenue / Dunne Avenue (unsignalized)
16. Church Street / Dunne Avenue
17. Butterfield Boulevard / Dunne Avenue
18. US 101 Southbound Ramps / Dunne Avenue
19. US 101 Northbound Ramps / Dunne Avenue
20. Condit Road / Dunne Avenue
21. Monterey Road / Tennant Avenue
22. Butterfield Boulevard / Main Avenue
23. Condit Road / Main Avenue
24. Hale Avenue / Dunne Avenue (Future only)

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 AM. The PM peak hour of traffic is typically between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on an average weekday.

Intersection Level of Service Methodology

The operations of roadway facilities are described in terms of level of service (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, with the best operating conditions, to LOS F, with the worst operating conditions. LOS E represents "at-capacity" operations. Operations are designated as LOS F when volumes exceed capacity, resulting in stop-and-go conditions.

Signalized Intersections

The level of service methodology for signalized intersections approved by the City of Morgan Hill and VTA analyzes intersection operations based on average control vehicular delay, as described in Chapter 16 of the *2000 Highway Capacity Manual* (2000 HCM) published by the Transportation Research Board, with adjusted saturation flow rates to reflect conditions in Santa Clara County. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is calculated using TRAFFIX analysis software and is correlated to a LOS designation as shown in Table 3.2-1. The City of Morgan Hill's 2001 General Plan established a minimum acceptable operating level of service for signalized intersections of LOS D+ and LOS E at freeway ramp intersections. LOS D is allowed at the following intersections (where achieving LOS D+ would require extraordinary development expenditure and right-of-way acquisition): Madrone Parkway and Monterey Road, Tennant Avenue and Butterfield Boulevard, and Watsonville Road and Monterey Road.

Table 3.2-1
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
B+	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 12.0
B		12.1 to 18.0
B-		18.1 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 23.0
C		23.1 to 32.0
C-		32.1 to 35.0
D+	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0
D		39.1 to 51.0
D-		51.1 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.	55.1 to 60.0
E		60.1 to 75.0
E-		75.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Sources: *Traffic Level of Service Analysis Guidelines*, VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

Unsignalized Intersections

Operations of unsignalized study intersections are evaluated using the method contained in Chapter 17 of the 2000 HCM and calculated using TRAFFIX analysis software. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side-street-stop controlled intersections, control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, delay is computed as

the average of all movements in that lane. For all-way stop-controlled locations, a weighted average delay for the entire intersection is presented. Table 3.2-2 summarizes the relationship between delay and LOS for unsignalized intersections. The City does not have an adopted LOS policy for unsignalized intersections in the General Plan; however, LOS D is considered to be the minimum acceptable LOS and has been used for traffic studies within the City.

Table 3.2-2
Unsignalized Intersection Level of Service Definitions

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	≤ 10.0
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 with intersection capacity exceeded.	> 50.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

Existing Intersection Levels of Service

Existing intersection lane configurations, signal timings, and peak-hour turning movement volumes were used to calculate existing intersection LOS. Intersection turning movement counts were completed in June 2007 and April 2008. The results of the LOS analysis for existing conditions are presented in Table 3.2-3.

Table 3.2-3
Existing Intersection Levels of Service

Intersection		Traffic Control	Peak Hour	Delay[1]	LOS[2]
1	Monterey Road/Cochrane Road	Signal	AM PM	27.6 29.1	C C
2	Butterfield Boulevard/ Cochrane Road	Signal	AM PM	16.7 13.0	B B
3	Monterey Road/ Central Avenue (us)	Two-Way Stop Controlled	AM PM	16.0 23.2	C C
4	Monterey Road/ Keystone Avenue (us)	Side Street Stop Controlled	AM PM	10.7 10.5	B B
5	Monterey Road/Main Avenue	Signal	AM PM	43.4 42.4	D D
6	Del Monte Street/ Main Avenue (us)	Two-Way Stop Controlled	AM PM	13.5 19.1	B C
7	Hale Avenue/Main Avenue (us)	All-Way Stop Controlled	AM PM	11.0 13.2	B B
8	Depot Street/Main Avenue (us)	Side Street Stop Controlled	AM PM	15.9 25.6	C D
9	Monterey Road/First Street (us)	Two-Way Stop Controlled	AM PM	10.2 10.9	B B

Table 3.2-3
Existing Intersection Levels of Service

Intersection		Traffic Control	Peak Hour	Delay[1]	LOS[2]
10	Monterey Road/Second Street	Signal	AM PM	10.7 12.5	B+ B
11	Monterey Road/Third Street (us)	Two-Way Stop Controlled	AM PM	10.5 11.1	B B
12	Monterey Road/Fourth Street (us)	Two-Way Stop Controlled	AM PM	14.2 18.9	B C
13	Monterey Road/Fifth Street (us)	Two-Way Stop Controlled	AM PM	17.9 17.0	C C
14	Monterey Road/Dunne Avenue	Signal	AM PM	28.6 36.6	C D+
15	Del Monte Street/Dunne Avenue (us)	Two-Way Stop Controlled	AM PM	12.0 15.0	B B
16	Church Street/Dunne Avenue	Signal	AM PM	18.8 19.5	B- B-
17	Butterfield Boulevard/Dunne Avenue	Signal	AM PM	30.7 39.4	C D
18	US 101 SB Ramps/Dunne Avenue	Signal	AM PM	20.7 21.5	C+ C+
19	US 101 NB Ramps/Dunne Avenue	Signal	AM PM	14.4 12.7	B B
20	Condit Road/Dunne Avenue	Signal	AM PM	32.7 28.3	C- C
21	Monterey Road/Tennant Avenue	Signal	AM PM	25.6 32.8	C C-
22	Butterfield Boulevard/Main Avenue	Signal	AM PM	34.4 37.7	C- D+
23	Condit Road/Main Avenue	Signal	AM PM	10.8 9.9	B+ A
24	Hale Avenue/Dunne Avenue (Future only)	Signal	AM PM	Future Intersection	

Notes:
(us) = unsignalized intersection
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 HCM, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2] LOS = Level of service. LOS calculations conducted using the TRAFFIX level of service analysis software package.
Unacceptable operations identified in **bold** text.

Two of the signalized study intersections currently operate at an unacceptable level, LOS D, under existing conditions during one or both peak hours:

- Monterey Road/Main Avenue (AM and PM peak hours)
- Butterfield Boulevard/Dunne Avenue (PM peak hour)

All of the unsignalized study intersections were observed to operate acceptably under existing conditions, with side street traffic volumes finding gaps to enter the intersections.

Study Freeway Segments

Freeway traffic conditions in the vicinity of the Specific Plan project area were analyzed on the following four freeway segments in the northbound and southbound direction:

1. US 101 north of Cochrane Road
2. US 101 between Cochrane Road and Dunne Avenue
3. US 101 between Dunne Avenue and Tennant Avenue
4. US 101 south of Tennant Avenue

Freeway Segment Level of Service Methodology

Freeway segments were evaluated using VTA's analysis procedure, which is based on the density of the traffic flow using methods described in the 2000 HCM. Density is expressed in passenger cars per mile per lane. The Congestion Management Program (CMP) maintained by the VTA includes a range of densities for freeway segment level of service as shown in Table 3.2-4. The adopted acceptable LOS standard for freeway segments, as defined by the CMP, is LOS E.

Table 3.2-4
Freeway Segment Level of Service Definitions

Level of Service	Description	Density (passenger cars/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.	≤ 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.	11.1 to 18.0
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.	18.1 to 26.0
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.	26.1 to 46.0
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.	46.1 to 58.0
F	Vehicular flow breakdowns occur. Large queues form behind breakdown points.	> 58.0

Sources: *Traffic Level of Service Analysis Guidelines*, VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

Existing Freeway Segment Level of Service

The existing freeway segment levels of service for the mixed-flow and HOV lanes based on the segment densities reported in the VTA's *2007 CMP Monitoring and Conformance Report*, are shown

in Table 3.2-5. One freeway segment currently includes an HOV lane, northbound US 101 from Cochrane Road to Burnett Avenue.

Table 3.2-5
Existing Freeway Segment Levels of Service

Direction	Segment	Peak Hour	Number of Lanes		Density		LOS	
			Mixed	HOV	Mixed	HOV	Mixed	HOV
NB US 101	San Martin Avenue to Tennant Avenue	AM	3	0	**59**	n/a	**F**	n/a
		PM	3	0	17	n/a	B	n/a
	Tennant Avenue to Dunne Avenue	AM	3	0	**71**	n/a	**F**	n/a
		PM	3	0	16	n/a	B	n/a
	Dunne Avenue to Cochrane Road	AM	3	0	47	n/a	E	n/a
		PM	3	0	16	n/a	B	n/a
	Cochrane Road to Burnett Avenue	AM	3	1	34	18	D	B
		PM	3	1	17	5	B	A
SB US 101	Burnett Avenue to Cochrane Road	AM	3	0	14	n/a	B	n/a
		PM	3	0	**66**	n/a	**F**	n/a
	Cochrane Road to Dunne Avenue	AM	3	0	15	n/a	B	n/a
		PM	3	0	56	n/a	E	n/a
	Dunne Avenue to Tennant Avenue	AM	3	0	13	n/a	B	n/a
		PM	3	0	28	n/a	D	n/a
	Tennant Avenue to San Martin Avenue	AM	3	0	10	n/a	A	n/a
		PM	3	0	32	n/a	D	n/a

Notes:
[1] Density based on volume from VTA's *2007 CMP Monitoring Data* (December 2007).
[2] NB - Northbound; SB - Southbound.
Unacceptable operations (LOS F) identified in **bold** text.

The following mixed-flow freeway segments operate at an unacceptable level, LOS E, under existing conditions:

- US 101, Northbound between San Martin Avenue and Tennant Avenue (AM peak hour)
- US 101, Northbound between Tennant Avenue and Dunne Avenue (AM peak hour)
- US 101, Southbound between Burnett Avenue and Cochrane Road (PM peak hour)

South County Circulation Study 2008

The VTA prepared the South County Circulation Study in April 2008. The South County Circulation Study is a high-level planning study that evaluates existing and projected future conditions related to land use changes and travel patterns in the southern part of Santa Clara County. The key purpose of the study was to identify transportation improvements that improve travel in the South County area. The Study assumed circulation networks would be built in accordance with then-existing General Plans, and was based on less precise land use modeling than the new citywide traffic model developed by Morgan Hill in 2008. The South County Circulation Study suggests that measures such as reviewing land use strategies, pursuing transit and multi-modal opportunities, High Occupancy Toll (HOT) lanes for new and existing roads, and optimizing infrastructure should be pursued. Regional impact fees are also considered as a source of revenue for improvements to regional transportation facilities. The City of Morgan Hill will continue to participate in regional

solutions; however, it is the primary responsibility of regional and state agencies (VTA and Caltrans) to address the need for additional capacity on freeways and regional-serving facilities.

It should be noted that Caltrans has accepted the adopted CMP TIA methodologies and it is appropriate to use the adopted CMP standard as the threshold of significance for impacts to the freeways.

It is also relevant to disclose, however, that Caltrans also states that it strives to maintain freeway facilities at the LOS C/D cusp per its *Guide for Preparation of Traffic Impact Studies* (December 2002). If the Caltrans LOS C/D was used as the threshold of significance for freeway impacts, then impacts to US 101 would be considered significant and unavoidable.

The Valley Transportation Authority and Caltrans are the responsible agencies for planning for and implementing improvements within the US 101 corridor. A fair share contribution from the City of Morgan Hill toward freeway improvement costs would be an acceptable mitigation measure; however, significant impacts are not reduced or eliminated until the freeway improvements are implemented. Additional sources would be needed to provide adequate funding, which can include State Transportation Improvement Program funds for projects identified in the Valley Transportation Plan 2030, impact fees from other jurisdictions, and/or a regional impact fee. The City has implemented an impact fee to develop some of the local Morgan Hill roadway improvement but does not have a funding strategy in place to contribute towards regional improvements, and there is no regional or state impact fee program established. City representatives do and will continue to work collaboratively with San José, Gilroy, Santa Clara County, counties to the south (i.e. Monterey, San Benito, and Merced Counties), the Valley Transportation Authority, and Caltrans to prepare and develop a funding strategy for South County freeway improvements. Payment of traffic impact fees or a fair share contribution would be expected to fulfill the City's obligations for mitigating regional traffic impacts; however, unless other funding sources such as a new regional impact fee, additional sales tax measures, contributions from other developers, or state funds are made available, feasible freeway and regional improvements to meet the Caltrans freeway LOS standard will not be implemented. As previously stated, it is appropriate that this EIR is based on the adopted CMP threshold of significance for freeway impacts, but it can be noted that if the LOS "C/D cusp" standard desired by Caltrans were to be considered, then projects that cause traffic to be added to freeway segments that operate below that level would be considered to create significant and unavoidable impacts, given, as discussed above, that there is no identified regional feasible mitigation measure or program that would ensure that improvements are made to achieve Caltrans' desired level of service on the freeway segments.

3.2.1.5 *Background Roadway Conditions*

Background Intersection Level of Service (2015 General Plan)

Background Traffic Volumes

The City's travel demand forecasting model was used to develop 2015 General Plan traffic volume estimates. The area included in the model extends from just south of the US 101/SR 85 interchange in San José to just south of Gilroy.

The Morgan Hill travel demand forecasting (TDF) model has a base year of 2007 and horizon years of 2015 and 2030, thus reflecting eight (8) and 23 years of growth in the City of Morgan Hill and the region, respectively. Future land use data is instrumental in estimating daily and peak hour trip

generation and subsequently future traffic demand. The 2015 General Plan land use estimates were based on input from City of Morgan Hill staff and regionally approved data from the Association of Bay Area Governments (ABAG) *Projections 2003* for the areas south of Morgan Hill in San Martin and Gilroy.[6]

The 2015 land use assumptions used in the Morgan Hill model include a total employment of 10,000 jobs and a total of 2,000 households in Coyote Valley. This level of development is based on the regionally approved forecasts developed for the Santa Clara Valley Transportation Authority (VTA) model which includes a portion of the approved Cisco Systems project (Coyote Valley Research Park).

The City's model includes land uses aggregated into specific geographic areas, or traffic analysis zones (TAZs). There are 36 TAZs within the downtown study area. The current General Plan estimates for existing and planned development that will exist by 2015 in the Downtown TAZs are 249,000 square feet of retail, 626 residential units, and 129,000 square feet of office/service uses.

Transportation Roadway Network

The current 2015 General Plan roadway network includes the following roadway improvements anticipated to be complete by 2015:

- Extension of Butterfield Boulevard north of Cochrane Road to Madrone Parkway,
- Extension of Butterfield Boulevard south of Tennant Avenue to Monterey Road,
- Extension of Hale Avenue/Santa Teresa Boulevard between Main Avenue and Spring Avenue as a 4-lane arterial,
- Closure of Fisher Avenue between Railroad Avenue and Butterfield Boulevard Extension,
- Closure of DeWitt Avenue between Price Drive and Spring Avenue,
- Extension of Walnut Grove Drive as a two-lane collector between Dunne Avenue and Diana Avenue,
- Extension of Jarvis Drive as a two-lane local road between Monterey Road and Butterfield Boulevard,
- Extension of Central Avenue as a two-lane collector between Butterfield Boulevard and Calle Mazatan,
- Tennant Ave widening as a four-lane arterial between US 101 Southbound Ramps and Murphy Avenue,
- Construct a loop on-ramp from eastbound Tennant Avenue to Northbound US 101,
- Monterey Road widened to a four-lane arterial between Cochrane Road and Old Monterey Road/Llagas Creek Drive,
- Extension of Llagas Creek Drive as a two-lane collector between Hale Avenue and Monterey Road,
- Realignment of Old Monterey Road to intersect with Llagas Creek Drive extension,
- Dunne Avenue widened to a four-lane arterial between Monterey Road and Peak Avenue,
- Edmundson Avenue widened to a four-lane arterial between Monterey Road and Piazza Way, and
- Realignment of San Pedro Avenue to intersect with Spring Avenue.

[6] Although the ABAG 2005 and 2007 projections were available at the time this model was prepared, that data set included inconsistencies in land use in the Gilroy area based on already built/occupied and planned development.

The results of the level of service analysis under 2015 General Plan conditions are summarized in Table 3.2-6. The LOS analysis results for 2015 General Plan conditions are included in this EIR for informational purposes only.

Table 3.2-6
Background Intersection Levels of Service (2015 General Plan)

Intersection		Traffic Control	Peak Hour	Delay[1]	LOS[2]
1	Monterey Road/Cochrane Road	Signal	AM PM	30.3 31.4	C C
2	Butterfield Boulevard/ Cochrane Road	Signal	AM PM	33.0 27.3	C- C
3	Monterey Road/Central Avenue (us)	Side-Street Stop	AM PM	101.4 >150	F F
4	Monterey Road/ Keystone Avenue (us)	Side-Street Stop	AM PM	13.7 14.7	B B
5	Monterey Road/Main Avenue	Signal	AM PM	**49.4** **43.2**	**D** **D**
6	Del Monte Street/Main Avenue (us)	Side-Street Stop	AM PM	15.1 20.1	C C
7	Hale Avenue/Main Avenue (us)	All-Way Stop	AM PM	14.1 14.9	B B
8	Depot Street/Main Avenue (us)	Side-Street Stop	AM PM	23.5 17.2	C C
9	Monterey Road/First Street (us)	Side-Street Stop	AM PM	12.0 12.8	B B
10	Monterey Road/Second Street	Signal	AM PM	12.0 13.1	B+ B
11	Monterey Road/Third Street (us)	Side-Street Stop	AM PM	12.3 13.4	B B
12	Monterey Road/Fourth Street (us)	Side-Street Stop	AM PM	**31.9** **76.9**	**D** **F**
13	Monterey Road/Fifth Street (us)	Side-Street Stop	AM PM	**34.5** **63.2**	**D** **F**
14	Monterey Road/Dunne Avenue	Signal	AM PM	30.1 34.9	C C-
15	Del Monte Street/Dunne Avenue (us)	Side-Street Stop	AM PM	13.7 19.9	B C
16	Church Street/Dunne Avenue	Signal	AM PM	21.5 21.0	C+ C+
17	Butterfield Boulevard/Dunne Avenue	Signal	AM PM	32.3 34.9	C- C-
18	US 101 SB Ramps/Dunne Avenue	Signal	AM PM	19.9 21.9	B- C+
19	US 101 NB Ramps/Dunne Avenue	Signal	AM PM	12.1 15.8	B B
20	Condit Road/Dunne Avenue	Signal	AM PM	32.8 33.8	C- C-
21	Monterey Road/Tennant Avenue	Signal	AM PM	32.6 31.1	C- C
22	Butterfield Boulevard/Main Avenue	Signal	AM PM	36.3 37.1	D+ D+

Table 3.2-6
Background Intersection Levels of Service (2015 General Plan)

Intersection		Traffic Control	Peak Hour	Delay[1]	LOS[2]
23	Condit Road/Main Avenue	Signal	AM PM	11.2 10.3	B+ B+
24	Hale Avenue/Dunne Avenue (Future only)	All-Way Stop	AM PM	13.9 13.4	B B

Notes:
(us) = unsignalized intersection
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the *2000 HCM*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2] LOS = Level of service. LOS calculations conducted using the TRAFFIX level of service analysis software package.
Unacceptable operations identified in **bold** text.

Of the 24 intersections analyzed, one signalized and three unsignalized intersections would operate at unacceptable levels of service under 2015 General Plan conditions. The Monterey Road/Main Avenue signalized intersection is projected to operate at LOS D during both peak hours. The following three unsignalized study intersections are projected to operate at an unacceptable level, LOS F, during one or both peak hours under 2015 General Plan background conditions.

- Monterey Road/Central Avenue (LOS F, AM and PM peak hours)
- Monterey Road/Fourth Street (LOS F, PM peak hour)
- Monterey Road/Fifth Street (LOS F, PM peak hour)

The remaining study intersections would operate at acceptable levels of service during both peak hours.

Background Intersection Level of Service (2030 General Plan)

The City's travel demand forecasting (TDF) model was used to develop General Plan 2030 traffic volume estimates. The area included in the model extends from just south of the US 101/SR 85 interchange in San Jose to just south of Gilroy.

The 2030 General Plan land use estimates were based on the same sources used for the General Plan 2015 estimates. The 2030 land use assumptions used in the Morgan Hill model include total employment of approximately 20,000 jobs and a total of 2,000 households in Coyote Valley. This level of development is based on the regionally approved forecasts developed for the Santa Clara Valley Transportation Authority (VTA) model which includes the approved Cisco Systems project (Coyote Valley Research Park) and discussions with City of San José staff.

The downtown study area is represented by 36 TAZs in the model. Table 13 summarizes the 2030 land uses in these TAZs based on the current General Plan provided by City of Morgan Hill staff. The current General Plan estimates for existing and planned development that will exist by 2030 in the Downtown TAZs are 273,000 square feet of retail, 764 residential units, and 199,000 square feet of office/service uses.

Transportation Roadway Network

The current 2030 General Plan roadway network includes the following roadway improvements, in addition to the 2015 General Plan roadway improvements, anticipated to be complete by 2030:

- Extension of Madrone Parkway as a four-lane arterial between Hale Avenue and Monterey Road,
- Edmundson Avenue widened to a four-lane arterial between Piazza Way and Sunnyside Avenue,
- Hale Avenue widening to a four-lane arterial between Tilton Avenue and Main Avenue,
- Realignment of DeWitt Avenue as a two-lane arterial with Sunnyside Avenue,
- Extension of Mission View Drive as a two-lane collector between Cochrane Road and Vista del Lomas Avenue,
- Extension and widening of Murphy Avenue/DePaul Avenue as a four-lane arterial between Cochrane Road and Dunne Avenue,
- Tennant Avenue widened to a four-lane arterial between Murphy Avenue and Hill Road,
- Monterey Road widened to a six-lane arterial between Burnett Avenue and Cochrane Road,
- Monterey Road widened to a six-lane arterial between Watsonville Road and Middle Avenue,
- Butterfield Boulevard widened to a six-lane arterial between Cochrane Road and Tennant Avenue,
- Murphy Road widened to a four-lane arterial between Dunne Avenue and Middle Avenue,
- Cochrane Road widened to a six-lane arterial between Monterey Road and Mission View Drive,
- Cochrane Road widened to a four-lane arterial between Mission View Drive and Peet Road,
- Main Avenue widened to a four-lane arterial between Depot Street and Hill Road,
- Watsonville Road widened to a four-lane arterial between Santa Teresa Boulevard and Monterey Road,
- Middle Avenue widened to a four-lane arterial between Monterey Road and Murphy Avenue,
- Extension of Serene Drive as a two-lane collector between Jarvis Drive and Central Avenue,
- Extension of Foothill Avenue as a two-lane collector between Barrett Avenue and Tennant Avenue,
- Dunne Avenue intersection at Depot Street closed with Dunne Avenue grade separation from Union Pacific railroad tracks,
- Extension of McKevly Lane as a two-lane collector between West Edmundson Avenue and La Crosse Drive,
- Extension of Hill Road/Peet Road as a two-lane collector between Half Road and Main Avenue.

The results of the level of service analysis under 2030 General Plan conditions are summarized in Table 3.2-7. The LOS analysis results for 2030 General Plan conditions are included in this EIR for informational purposes only.

Table 3.2-7
Background Intersection Levels of Service (2030 General Plan)

Intersection		Traffic Control	Peak Hour	Delay[1]	LOS[2]
1	Monterey Road/Cochrane Road	Signal	AM PM	32.7 34.7	C- C-
2	Butterfield Boulevard/ Cochrane Road	Signal	AM PM	35.2 33.0	D+ C-
3	Monterey Road/Central Avenue (us)	Side-Street Stop	AM PM	>150 >150	F F
4	Monterey Road/ Keystone Avenue (us)	Side-Street Stop	AM PM	13.9 15.2	B C
5	Monterey Road/Main Avenue	Signal	AM PM	**55.4** **48.0**	**E+** **D**
6	Del Monte Street/Main Avenue (us)	Side-Street Stop	AM PM	15.6 19.6	C C

Table 3.2-7
Background Intersection Levels of Service (2030 General Plan)

Intersection		Traffic Control	Peak Hour	Delay[1]	LOS[2]
7	Hale Avenue/Main Avenue (us)	All-Way Stop	AM PM	26.8 17.7	D C
8	Depot Street/Main Avenue (us)	Side-Street Stop	AM PM	33.0 21.3	D C
9	Monterey Road/First Street (us)	Side-Street Stop	AM PM	12.6 13.6	B B
10	Monterey Road/Second Street	Signal	AM PM	11.6 12.9	B+ B
11	Monterey Road/Third Street (us)	Side-Street Stop	AM PM	13.1 14.0	B B
12	Monterey Road/Fourth Street (us)	Side-Street Stop	AM PM	**70.0** **>150**	**F** **F**
13	Monterey Road/Fifth Street (us)	Side-Street Stop	AM PM	**48.2** **102.9**	**E** **F**
14	Monterey Road/Dunne Avenue	Signal	AM PM	31.6 36.0	C D+
15	Del Monte Street/Dunne Avenue (us)	Side-Street Stop	AM PM	16.5 17.9	C C
16	Church Street/Dunne Avenue	Signal	AM PM	22.0 21.1	C+ C+
17	Butterfield Boulevard/Dunne Avenue	Signal	AM PM	32.3 37.3	C- D+
18	US 101 SB Ramps/Dunne Avenue	Signal	AM PM	20.2 23.0	C+ C
19	US 101 NB Ramps/Dunne Avenue	Signal	AM PM	13.8 16.5	B B
20	Condit Road/Dunne Avenue	Signal	AM PM	31.9 32.9	C C-
21	Monterey Road/Tennant Avenue	Signal	AM PM	33.9 31.7	C- C
22	Butterfield Boulevard/Main Avenue	Signal	AM PM	36.8 38.5	D+ D+
23	Condit Road/Main Avenue	Signal	AM PM	10.9 8.6	B+ A
24	Hale Avenue/Dunne Avenue (Future only)	All-Way Stop	AM PM	20.5 14.8	C B

Notes:
(us) = unsignalized intersection
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the *2000 HCM*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2] LOS = Level of service. LOS calculations conducted using the TRAFFIX level of service analysis software package.
Unacceptable operations identified in **bold** text.

Of the 24 intersections analyzed, one signalized and three unsignalized intersections would operate at unacceptable levels of service under 2030 General Plan conditions. The Monterey Road/Main Avenue signalized intersection is projected to operate at LOS E+ during the AM peak hour and LOS D during the PM peak hour. The following three unsignalized study intersections is projected to operate at unacceptable levels, LOS E or F, during one or both peak hours under 2030 General Plan background conditions.

- Monterey Road/Central Avenue (LOS F, AM and PM peak hours)
- Monterey Road/Fourth Street (LOS F, AM and PM peak hours)
- Monterey Road/Fifth Street (LOS E , AM peak hour and LOS F, PM peak hour)

The remaining study intersections would operate at acceptable levels of service during both peak hours.

3.2.2 Transportation Impacts

The following discussion evaluates traffic impacts of the Specific Plan by analyzing projected 2015 and 2030 development conditions against existing conditions, for both the Project and Project Alternate roadway network.

The analysis provides information on projected transportation network impacts from proposed General Plan amendments, and allows for the identification of possible mitigation measures well in advance of impacts, allowing the City of Morgan Hill to plan for and fund needed infrastructure improvements. The analysis was completed in conformance with the City of Morgan Hill Transportation Impact Guidelines for General Plan amendments. Development through 2015 is evaluated for near-term impact; development through 2030 is considered long-term, and cannot be evaluated with the same level of certainty. There are, for example, uncertainties about the timeline for implementation of certain planned, but not funded, transportation improvements (such as US 101 widening). Subsequent project level analysis may be required for development beyond the 2015 assumptions addressed in this EIR, depending upon whether the analytical parameters remain valid at the time future projects are proposed.

3.2.2.1 *Thresholds of Significance*

For the purposes of this EIR, a transportation impact is considered significant if the project would:

- Cause the level of service at a signalized intersection to degrade from an acceptable LOS D+ or better under existing conditions to an unacceptable LOS D or worse under 2015 or 2030 project conditions; or
- Increase the average critical delay by four (4) seconds or more and the volume-to-capacity ratio (V/C) by 0.01 at signalized intersections currently operating at LOS D or worse under existing conditions; or
- Cause freeway ramp intersection operations to deteriorate from LOS E or better under existing conditions to an unacceptable LOS F; or
- Cause the level of service at an unsignalized intersection to degrade from an acceptable LOS D or better under existing conditions to an unacceptable LOS E or worse under project conditions, **and** the traffic volumes at the intersection to increase such that the Peak Hour Warrant for traffic signal installation is met; or
- Exacerbate operations at an unsignalized intersection already operating at an unacceptable level of LOS E or worse under existing conditions and the Peak Hour Warrant for traffic signal installation is met; or
- Cause the LOS on a freeway segment to degrade from an acceptable LOS E or better under existing conditions to an unacceptable LOS F under project conditions, or
- Contribute one percent of capacity on a freeway segment operating at an unacceptable LOS F under existing conditions, or
- Result in inadequate parking capacity.

3.2.2.2 *2015 Analysis*

2015 General Plan Plus Projected Specific Plan Development

The proposed Downtown Specific Plan would add housing, retail, and office/service land uses within the Specific Plan project area. An analysis of projected 2015 development in the Specific Plan project area was completed based on land use assumptions for 2015. This analysis includes an increase of approximately 1,010 multi-family residential units, 105,000 square feet of retail, and 46,000 square feet of office/service development in the Specific Plan project area.

These assumptions are slightly different than the assumptions listed in Table 2.1-2 (850 dwelling units, 21,221 square feet of retail development, and 30,157 square feet of office/service development) in order to provide a conservative analysis of buildout for the Specific Plan by 2015 and assuming a higher redevelopment rate for the planned uses.

For the purposes of this EIR transportation discussion, "2015 Project" refers to the projected development in 2015 under the proposed Downtown Specific Plan.

Transportation Roadway Network

The 2015 General Plan plus project roadway network is the same as the 2015 General Plan roadway network.

2015 Project Trip Generation Estimates

The proposed land use changes were added to the City's travel demand model to estimate AM and PM peak-hour vehicle trips from the projected 2015 development in the Specific Plan project area. As shown in Table 3.2-8, the project would generate a total of approximately 7,671 daily, 625 AM peak-hour, and 663 PM peak-hour trips according to the model. Of these total trips, 712 daily, 68 AM peak-hour, and 64 PM peak-hour trips are internal to the downtown area.

Table 3.2-8
2015 Project Trip Generation Estimates

Trip Type	Daily Trips	AM Peak Hour	PM Peak Hour
External Trips	6,959	557	599
Internal Trips	712	68	64
Total Trips	7,671	625	663

Source: Fehr & Peers, City of Morgan Hill Travel Demand Forecasting Model, May 2009.

2015 Project Intersection Levels of Service

Intersection levels of service were calculated with projected 2015 development traffic volumes, and the results are summarized in Table 3.2-9. The intersection LOS results relative to existing conditions are shown, along with the projected increases in critical delay and critical volume-to-capacity (V/C) ratios. Critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection operations. The changes in critical delay and critical V/C ratios between existing conditions and projected 2015 conditions are used to identify significant impacts. In some instances, slight improvements in critical delay are shown due to the modeled green time for various turning movements.

Under projected 2015 conditions all of the signalized intersections would operate acceptably under the existing General Plan level of service policy except the Main Avenue/Monterey Road intersection which would operate at LOS D during both the AM and PM peak hours. In addition, the following three unsignalized study intersection operations would degrade to LOS E or F during one or both peak hours:

- Monterey Road/Central Avenue (LOS F, AM and PM peak hours)
- Monterey Road/Fourth Street (LOS F, AM and PM peak hours)
- Monterey Road/Fifth Street (LOS E, AM peak hour and LOS F, PM peak hour)

The remaining unsignalized study intersections would operate at acceptable levels of service during both peak hours.

2015 Signal Warrant Analysis

Signal warrant analysis was conducted for each unsignalized study intersection operating at LOS E or F. The analysis applies the peak-hour traffic signal warrants recommended in the *Federal Highway Administration Manual on Uniform Traffic Control Devices (2003)* and associated State guidelines. Under projected 2015 conditions, none of the unsignalized study intersections operating at LOS E or F would meet the peak-hour warrant criteria for signalization during either the AM or PM peak hours and, therefore, would not be significantly impacted.[7]

Impact TRANS-1: Under 2015 conditions, the proposed project would exacerbate LOS D intersection operations at Monterey Road/Main Avenue during the AM peak hour. **(Significant Impact)**

2015 Project Alternate Levels of Service

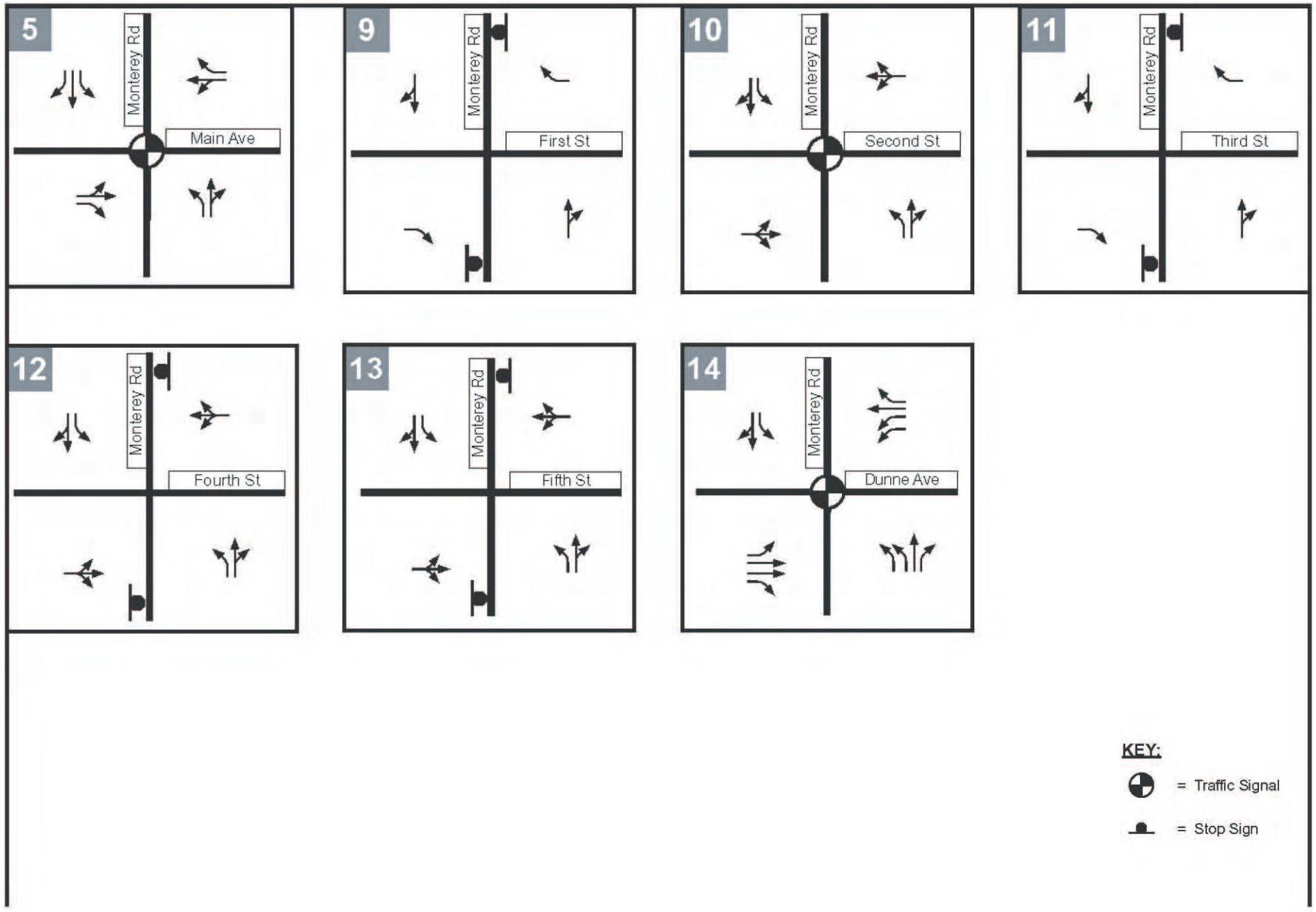
The 2015 Project Alternate level of service analysis assumes the same amount of development and volume of traffic would occur in the Specific Plan project area, however, the roadway network within the project area would be different than in the City's General Plan. The Project Alternate roadway network is shown in Figure 16. The 2015 Project Alternate roadway network is the same as the 2015 General Plan roadway network with the exception of the following two changes:

1) Monterey Road is narrowed from four to two lanes from Main Avenue to Dunne Avenue to potentially accommodate wider sidewalks, on-street parking, and streetscape improvements.

2) Maintain the existing roadway network at the Depot Street/Dunne Avenue intersection instead of closing Depot Street at Dunne Avenue to accommodate Dunne Avenue being built under the railroad crossing, located east of Depot Street, as called for in the current General Plan.

Intersection levels of service were calculated with the 2015 Project Alternate traffic volumes, and the results are summarized in Table 3.2-9. The results for existing conditions are included for comparison purposes, along with the projected increases in critical delay and critical volume-to-capacity (V/C) ratios. Critical delay represents the delay associated with the critical movements of

[7] The signal warrant analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. The City of Morgan Hill should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants to prioritize and program intersections for signalization as needed.



PROJECT ALTERNATE ROADWAY NETWORK
INTERSECTION LANE GEOMETRIES AND INTERSECTION CONTROLS

FIGURE 16

Table 3.2-9
Existing and 2015 Project and Project Alternate Intersection Levels of Service

	Intersection	Traffic Control (Existing/ 2015 Project)	Peak Hour	Existing		2015 Project Conditions					2015 Project Alternate Conditions				
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?[5]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?
1	Monterey Road/ Cochrane Road	Signal	AM	27.6	C	30.5	C	0.287	2.9	N/A	30.5	C	0.275	2.6	N/A
			PM	29.1	C	31.5	C	0.194	-0.4	N/A	30.9	C	0.172	-1.1	N/A
2	Butterfield Boulevard/ Cochrane Road	Signal	AM	16.7	B	33.5	C-	0.176	16.8	N/A	33.1	C-	0.177	16.8	N/A
			PM	13.0	B	27.9	C	0.263	17.6	N/A	28.5	C	0.295	18.2	N/A
3	Monterey Road/ Central Avenue (us)	Side-Street Stop	AM	16.0	C	72.7	F	N/A	N/A	No	93.5	F	N/A	N/A	No
			PM	23.2	C	>150	F	N/A	N/A	No	146.0	F	N/A	N/A	No
4	Monterey Road/ Keystone Avenue (us)	Side-Street Stop	AM	10.7	B	20.9	C	N/A	N/A	N/A	13.0	B	N/A	N/A	N/A
			PM	10.5	B	15.1	C	N/A	N/A	N/A	13.9	B	N/A	N/A	N/A
5	Monterey Road/ Main Avenue[6]	Signal	AM	43.4	D	**50.5**	**D**	**0.289**	**11.4**	N/A	**85.5**	**F**	**0.494**	**60.7**	N/A
			PM	42.4	D	44.3	D	0.169	0.9	N/A	**53.6**	**D-**	**0.267**	**14.8**	N/A
6	Del Monte Street/ Main Avenue (us)	Side-Street Stop	AM	13.5	B	15.1	C	N/A	N/A	N/A	16.1	C	N/A	N/A	N/A
			PM	19.1	C	20.1	C	N/A	N/A	N/A	20.7	C	N/A	N/A	N/A
7	Hale Avenue/ Main Avenue (us)	All-Way Stop	AM	11.0	B	14.4	B	N/A	N/A	N/A	19.2	C	N/A	N/A	N/A
			PM	13.2	B	14.8	B	N/A	N/A	N/A	18.3	C	N/A	N/A	N/A
8	Depot Street/ Main Avenue (us)	Side-Street Stop	AM	15.9	C	29.3	D	N/A	N/A	N/A	32.1	D	N/A	N/A	N/A
			PM	25.6	D	19.1	C	N/A	N/A	N/A	30.0	D	N/A	N/A	N/A
9	Monterey Road/ First Street (us)	Side-Street Stop	AM	10.2	B	12.2	B	N/A	N/A	N/A	13.2	B	N/A	N/A	N/A
			PM	10.9	B	13.2	B	N/A	N/A	N/A	14.9	B	N/A	N/A	N/A
10	Monterey Road/ Second Street	Signal	AM	10.7	B+	12.3	B	0.167	2.3	N/A	12.9	B	0.266	3.7	N/A
			PM	12.5	B	14.4	B	0.192	2.5	N/A	14.8	B	0.304	4.0	N/A
11	Monterey Road/ Third Street (us)	Side-Street Stop	AM	10.5	B	12.6	B	N/A	N/A	N/A	13.5	B	N/A	N/A	N/A
			PM	11.1	B	14.7	B	N/A	N/A	N/A	16.9	C	N/A	N/A	N/A
12	Monterey Road/ Fourth Street (us)	Side-Street Stop	AM	14.2	B	51.5	F	N/A	N/A	No	31.7	D	N/A	N/A	N/A
			PM	18.9	C	>150	F	N/A	N/A	No	80.4	F	N/A	N/A	No
13	Monterey Road/ Fifth Street (us)	Side-Street Stop	AM	17.9	C	37.1	E	N/A	N/A	No	36.4	E	N/A	N/A	No
			PM	17.0	C	90.2	F	N/A	N/A	No	65.3	F	N/A	N/A	No
14	Monterey Road/ Dunne Avenue	Signal	AM	28.6	C	31.0	C	0.154	3.3	N/A	33.2	C-	0.249	5.0	N/A
			PM	36.6	D+	35.2	D+	0.014	-6.3	N/A	**43.3**	**D**	**0.283**	**11.4**	N/A
15	Del Monte Street/ Dunne Avenue (us)	Side-Street Stop	AM	12.0	B	13.8	B	N/A	N/A	N/A	14.9	B	N/A	N/A	N/A
			PM	15.0	B	19.9	C	N/A	N/A	N/A	20.8	C	N/A	N/A	N/A

Table 3.2-9
Existing and 2015 Project and Project Alternate Intersection Levels of Service

	Intersection	Traffic Control (Existing/ 2015 Project)	Peak Hour	Existing		2015 Project Conditions					2015 Project Alternate Conditions				
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?[5]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?
16	Church Street/ Dunne Avenue	Signal	AM	18.8	B-	20.4	C+	0.006	0.3	N/A	21.2	C+	0.057	3.0	N/A
			PM	19.5	B-	20.8	C+	0.097	1.7	N/A	21.2	C+	0.118	2.6	N/A
17	Butterfield Boulevard/ Dunne Avenue	Signal	AM	30.7	C	32.6	C-	0.027	-0.8	N/A	32.7	C-	0.041	-0.9	N/A
			PM	39.4	D	35.7	D+	0.024	-4.8	N/A	36.4	D+	0.030	-4.4	N/A
18	US 101 SB Ramps/ Dunne Avenue	Signal	AM	20.7	C+	19.8	B-	0.092	0.7	N/A	19.8	B-	0.092	0.7	N/A
			PM	21.5	C+	21.9	C+	-0.034	-0.7	N/A	21.8	C+	-0.028	-0.6	N/A
19	US 101 NB Ramps/ Dunne Avenue	Signal	AM	14.4	B	12.1	B	-0.012	-2.8	N/A	12.1	B	-0.012	-2.8	N/A
			PM	12.7	B	16.0	B	0.014	3.3	N/A	16.2	B	0.020	3.5	N/A
20	Condit Road/ Dunne Avenue	Signal	AM	32.7	C-	32.7	C-	0.041	0.4	N/A	32.8	C-	0.041	0.4	N/A
			PM	28.3	C	33.8	C-	0.028	6.7	N/A	33.8	C-	0.028	6.7	N/A
21	Monterey Road/ Tennant Avenue	Signal	AM	25.6	C	32.6	C-	-0.005	6.5	N/A	33.0	C-	-0.001	7.3	N/A
			PM	32.8	C-	31.0	C	0.015	-1.9	N/A	31.3	C	0.009	-1.6	N/A
22	Butterfield Boulevard/ Main Avenue	Signal	AM	34.4	C-	37.0	D+	0.134	-0.7	N/A	37.1	D+	0.151	-1.1	N/A
			PM	37.7	D+	37.3	D+	0.160	-0.2	N/A	37.1	D+	0.174	-0.5	N/A
23	Condit Road/ Main Avenue	Signal	AM	10.8	B+	11.3	B+	0.014	0.1	N/A	11.3	B+	0.014	0.1	N/A
			PM	9.9	A	10.3	B+	0.111	0.6	N/A	10.3	B+	0.104	0.5	N/A
24	Hale Avenue/Dunne Avenue (Future only)	Future Int./ All-Way Stop	AM	Future Intersection		14.2	B	0.458	14.2	N/A	18.6	C	0.663	18.6	N/A
			PM			13.3	B	0.398	13.2	N/A	18.2	C	0.718	18.2	N/A

Notes:
Significant impacts identified in **bold** text.
(us) = unsignalized intersection
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the *2000 HCM*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2] LOS = Level of service. LOS calculations conducted using the TRAFFIX LOS analysis software package.
[3] Change in the critical volume-to-capacity ratio (V/C) between Existing and 2015 Project Conditions and 2015 Project Alternate Conditions.
[4] Change in critical movement delay between Existing and 2015 Project Conditions and 2015 Project Alternate Conditions.
[5]Peak hour signal warrant analysis completed for unacceptable unsignalized intersection operations.
[6]No feasible improvements are available to provide LOS D+ or better operations due to building and right-of-way constraints.

the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection operations. The changes in critical delay and critical V/C ratios between existing and the project alternate conditions are used to identify significant impacts. In some instances, slight improvements in critical delay are reported due to the method the program uses to allocate green time to the various turning movements.

Under the 2015 Project Alternate conditions, all of the signalized intersections are projected to operate acceptably under the existing General Plan LOS policy except the Main Avenue/Monterey Road (LOS F during AM and LOS D- during PM) and Dunne Avenue/Monterey Road (LOS D during PM) intersections. In addition, the following three unsignalized study intersections are projected to operate unacceptably (LOS E or F) during one or both peak hours:

- Central Avenue/Monterey Road (LOS F, AM and PM peak hours)
- Fourth Street/Monterey Road (LOS F, PM peak hour)
- Fifth Street/Monterey Road (LOS E, AM peak hour and LOS F, PM peak hour)

The remaining unsignalized study intersections are projected to operate at acceptable levels of service during both peak hours.

2015 Project Alternate Signal Warrant Analysis

Signal warrant analysis was conducted for each unsignalized study intersection operating at LOS E or F. The analysis applies the peak-hour traffic signal warrants recommended in the *Federal Highway Administration Manual on Uniform Traffic Control Devices (2003)* and associated State guidelines. Under 2015 Project Alternate conditions, no unsignalized study intersections would meet the peak-hour signalization criteria during the AM or PM peak hour.

Impact TRANS-1a: Under 2015 conditions, the project alternate would result in impacts to the intersection of Monterey Road/Main Avenue (LOS F during AM and LOS D- during PM peak hour). **(Significant Impact)**

Impact TRANS-2a: Under 2015 conditions, the project alternate would result in impacts to the intersection of Dunne Avenue/Monterey Road (LOS D during PM peak hour). **(Significant Impact)**

2015 Freeway Segment Level of Service

According to adopted CMP TIA guidelines, freeway segments to which a proposed development is projected to add trips equal to or greater than one percent of the freeway segment's capacity must be evaluated. Segments of US 101 were reviewed to determine if a significant amount of project traffic would be added to these freeway segments. Capacities of 2,300 vehicles per hour per lane (vphpl) for freeway segments were used in the freeway analysis.

Table 3.2-10 outlines the estimated number of new trips added to the freeway segments under projected 2015 development. The proposed project is expected to add between 0.07 and 0.65 percent of the capacity to the freeway study segments.

The proposed project would not add new trips greater than one percent of the freeway segment capacity to any of the study freeway segments and no additional freeway segment analysis is required for the proposed project.

As previously described, it should be noted that Caltrans has accepted the adopted CMP TIA methodologies, and it is appropriate to use the adopted CMP standard as the threshold of significance for impacts to the freeways.

It is also relevant to disclose, however, that Caltrans also states that it strives to maintain freeway facilities at the LOS C/D cusp per its *Guide for Preparation of Traffic Impact Studies* (December 2002). If the Caltrans LOS C/D was used as the threshold of significance for freeway impacts, then impacts to US 101 would be considered significant and unavoidable.

The Valley Transportation Authority and Caltrans are the responsible agencies for planning for and implementing improvements within the US 101 corridor. A fair share contribution from the City of Morgan Hill toward freeway improvement costs would be an acceptable mitigation measure; however, significant impacts are not reduced or eliminated until the freeway improvements are implemented. Additional sources would be needed to provide adequate funding, which can include State Transportation Improvement Program funds for projects identified in the Valley Transportation Plan 2030, impact fees from other jurisdictions, and/or a regional impact fee. The City has implemented an impact fee to develop some of the local Morgan Hill roadway improvement but does not have a funding strategy in place to contribute towards regional improvements, and there is no regional or state impact fee program established. City representatives do and will continue to work collaboratively with San José, Gilroy, Santa Clara County, counties to the south (i.e. Monterey, San Benito, and Merced Counties), the Valley Transportation Authority, and Caltrans to prepare and develop a funding strategy for South County freeway improvements. Payment of traffic impact fees or a fair share contribution would be expected to fulfill the City's obligations for mitigating regional traffic impacts; however, unless other funding sources such as a new regional impact fee, additional sales tax measures, contributions from other developers, or state funds are made available, feasible freeway and regional improvements to meet the Caltrans freeway LOS standard will not be implemented. As previously stated, it is appropriate that this EIR is based on the adopted CMP threshold of significance for freeway impacts, but it can be noted that if the LOS "C/D cusp" standard desired by Caltrans were to be considered, then projects that cause traffic to be added to freeway segments that operate below that level would be considered to create significant and unavoidable impacts, given, as discussed above, that there is no identified regional feasible mitigation measure or program that would ensure that improvements are made to achieve Caltrans' desired level of service on the freeway segments.

Impact TRANS-3: The project would not significantly degrade the level of service or add more than one percent of the freeway segment's capacity to any of the study freeway segments and, therefore, would have less than significant impacts to study freeway segments under 2015 conditions. **(Less Than Significant Impact)**

Table 3.2-10
Freeway Segment Levels of Service with 2015 Projected Development

Direction	From	To	Capacity	Peak Hour	Existing Conditions				2015 Conditions									
					Density		LOS		Trips Added		Density		LOS		% Added		Impact	
					MF	HOV	MF	HOV	MF	HOV	MF	HOV	MF	HOV	MF	HOV	MF	HOV
NB US 101	San Martin Avenue	Tennant Avenue	6,900	AM	59	N/A	F	N/A	18	N/A	59	N/A	F	N/A	0.26	N/A	No	N/A
				PM	17	N/A	B	N/A	38	N/A	17	N/A	B	N/A	0.55	N/A	No	N/A
	Tennant Avenue	Dunne Avenue	6,900	AM	71	N/A	F	N/A	5	N/A	71	N/A	F	N/A	0.07	N/A	No	N/A
				PM	16	N/A	B	N/A	27	N/A	16	N/A	B	N/A	0.39	N/A	No	N/A
	Dunne Avenue	Cochrane Road	6,900	AM	47	N/A	E	N/A	6	N/A	47	N/A	E	N/A	0.09	N/A	No	N/A
				PM	16	N/A	B	N/A	8	N/A	16	N/A	B	N/A	0.12	N/A	No	N/A
	Cochrane Road	Burnett Avenue	6,900	AM	34	18	D	B	43	8	34	18	D	C	0.63	0.43	No	No
				PM	17	5	B	A	27	3	17	5	B	A	0.40	0.15	No	No
SB US 101	Burnett Avenue	Cochrane Road	6,900	AM	14	N/A	B	N/A	30	N/A	14	N/A	B	N/A	0.43	N/A	No	N/A
				PM	66	N/A	F	N/A	45	N/A	66	N/A	F	N/A	0.65	N/A	No	N/A
	Cochrane Road	Dunne Avenue	6,900	AM	15	N/A	B	N/A	11	N/A	15	N/A	B	N/A	0.16	N/A	No	N/A
				PM	56	N/A	E	N/A	12	N/A	56	N/A	E	N/A	0.17	N/A	No	N/A
	Dunne Avenue	Tennant Avenue	6,900	AM	13	N/A	B	N/A	27	N/A	13	N/A	B	N/A	0.39	N/A	No	N/A
				PM	28	N/A	D	N/A	6	N/A	28	N/A	D	N/A	0.09	N/A	No	N/A
	Tennant Avenue	San Martin Avenue	6,900	AM	10	N/A	A	N/A	28	N/A	10	N/A	A	N/A	0.41	N/A	No	N/A
				PM	32	N/A	D	N/A	28	N/A	32	N/A	D	N/A	0.41	N/A	No	N/A

Notes:
[1] Density based on volume from VTA's *2007 CMP Monitoring Data*.
[2] NB – Northbound; SB - Southbound.
[3] MF – Mix-Flow; HOV – High-Occupancy Vehicle
Significant impacts identified in **bold** text.

3.2.2.3 *2030 Analysis*

2030 General Plan Plus Projected Specific Plan Development

The City's traffic model was used to forecast traffic volumes based on land use assumption changes expected in the downtown area by 2030. These land use assumptions include all projected development that is anticipated to occur by 2030. This analysis includes an increase of approximately 1,204 multi-family residential units, 186,000 square feet of retail, and 100,000 square feet of office/service development in the Specific Plan project area.

These assumptions are slightly different than the assumptions listed in Table 2.1-2 (1,192 dwelling units, 93,490 square feet of retail development, and 85,591 square feet of office/service development) in order to provide a conservative analysis of buildout for the Specific Plan by 2030 and assuming a higher redevelopment rate for the planned uses. This occurs by having the traffic modeling reflect an additional 20,000 square feet of retail and 15,000 square feet of office within the 14-block Downtown Core area, and reflect an assumption for analytical purposes that Block 20 remains as existing with 90,000 square feet of retail and eight (8) dwelling units rather than 17,000 square feet of retail and 90 residential units.

For the purposes of this EIR transportation discussion, "2030 Project" refers to the projected development in 2030 under the proposed Downtown Specific Plan.

Transportation Roadway Network

The 2030 General Plan plus project roadway network is the same as the 2030 General Plan roadway network previously described in *Section 3.2.1.5*.

2030 Project Trip Generation Estimates

The proposed land use changes were added to the City's travel demand model and AM and PM peak-hour vehicle trips from the projected 2030 development in the Specific Plan project area. As shown in Table 3.2-11, the project would generate a total of 10,520 daily, 807 AM peak-hour, and 911 PM peak-hour trips by 2030 according to the model. Of these total vehicle trips, 961 daily, 82 AM peak-hour, and 87 PM peak-hour trips are internal to the downtown area.

Table 3.2-11
2030 Project Trip Generation Estimates

Trip Type	Daily Trips	AM Peak Hour	PM Peak Hour
External Trips	9,559	725	824
Internal Trips	961	82	87
Total Trips	10,520	807	911

Source: Fehr & Peers, City of Morgan Hill Travel Demand Forecasting Model, May 2009.

2030 Project Intersection Levels of Service

Intersection levels of service were calculated with projected 2030 traffic volumes, and the results are summarized in Table 3.2-12. The intersection LOS results relative to existing conditions are shown, along with the projected increases in critical delay and critical volume-to-capacity (V/C) ratios. Critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection

operations. The changes in critical delay and critical V/C ratios between existing and projected 2030 conditions are used to identify significant impacts. In some instances, slight improvements in critical delay are reported due to the method the program uses to allocate green time to the various turning movements.

Under the projected 2030 conditions all of the signalized intersections are projected to operate acceptably during one or both peak hours under the existing LOS policy except the Main Avenue/Monterey Road intersection, which is projected to operate at LOS E during the AM peak hour and LOS D- during the PM peak hour.

Under the projected 2030 conditions the following four unsignalized study intersections are projected to operate unacceptably (LOS E or F) during one or both peak hours:

- Central Avenue/Monterey Road (LOS F, AM and PM peak hours)
- Main Avenue/Depot Street (LOS E, AM peak hour)
- Fourth Street/Monterey Road (LOS F, AM and PM peak hours)
- Fifth Street/Monterey Road (LOS F, AM and PM peak hours)

The remaining unsignalized study intersections are projected to operate at acceptable levels of service during both peak hours.

2030 Signal Warrant Analysis

Under 2030 Specific Plan project conditions, the Depot Street/Main Avenue intersection is the only intersection that would meet the peak-hour warrant criteria for signalization during both the AM and PM peak hours. The project, therefore, would result in a significant impact to this unsignalized intersection.[8]

Impact TRANS-4: The proposed Specific Plan, under 2030 conditions, would degrade Monterey Road/Main Avenue intersection operations from LOS D to LOS E and LOS D- during the AM and PM peak hours, respectively. **(Significant Impact)**

Impact TRANS-5: The proposed Specific Plan, under 2030 conditions, would degrade Depot Street/Main Avenue intersection operations from LOS C to LOS E during the AM peak hour and would meet the peak hour signal warrant criteria. **(Significant Impact)**

[8] Ibid.

Table 3.2-12
Existing and 2030 Project and Project Alternate Intersection Levels of Service

	Intersection	Traffic Control (Existing/ 2030 Project)	Peak Hour	Existing		2030 Project Conditions					2030 Project Alternate Conditions				
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?[5]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?
1	Monterey Road/ Cochrane Road	Signal	AM	27.6	C	32.8	C-	0.331	4.2	N/A	32.4	C-	0.304	3.5	N/A
			PM	29.1	C	34.8	C-	0.373	8.7	N/A	35.3	D+	0.397	9.4	N/A
2	Butterfield Boulevard/ Cochrane Road	Signal	AM	16.7	B	35.6	D+	0.313	20.3	N/A	36.5	D+	0.3400.	21.1	N/A
			PM	13.0	B	33.7	C-	0.440	26.4	N/A	33.9	C-	453	28.1	N/A
3	Monterey Road/ Central Avenue (us)	Side-Street Stop	AM	16.0	C	>150	F	N/A	N/A	No	>150	F	N/A	N/A	No
			PM	23.2	C	>150	F	N/A	N/A	No	>150	F	N/A	N/A	No
4	Monterey Road/ Keystone Avenue (us)	Side-Street Stop	AM	10.7	B	14.2	B	N/A	N/A	N/A	13.3	B	N/A	N/A	N/A
			PM	10.5	B	15.4	C	N/A	N/A	N/A	14.4	B	N/A	N/A	N/A
5	Monterey Road/ Main Avenue[6]	Signal	AM	43.4	D	**60.0**	**E**	**0.389**	**26.6**	N/A	**102.2**	**F**	**0.582**	**89.7**	N/A
			PM	42.4	D	**51.7**	**D-**	**0.253**	**8.6**	N/A	**75.0**	**E**	**0.383**	**39.9**	N/A
6	Del Monte Street/ Main Avenue (us)	Side-Street Stop	AM	13.5	B	16.2	C	N/A	N/A	N/A	18.3	C	N/A	N/A	N/A
			PM	19.1	C	21.7	C	N/A	N/A	N/A	23.2	C	N/A	N/A	N/A
7	Hale Avenue/ Main Avenue (us)	All-Way Stop	AM	11.0	B	28.4	D	N/A	N/A	N/A	**49.9**	**E**	N/A	N/A	**Yes**
			PM	13.2	B	18.9	C	N/A	N/A	N/A	27.9	D	N/A	N/A	N/A
8	Depot Street/ Main Avenue (us)	Side-Street Stop	AM	15.9	C	**42.1**	**E**	N/A	N/A	**Yes**	**43.8**	**E**	N/A	N/A	**Yes**
			PM	25.6	D	26.7	D	N/A	N/A	N/A	**84.6**	**F**	N/A	N/A	**Yes**
9	Monterey Road/ First Street (us)	Side-Street Stop	AM	10.2	B	12.8	B	N/A	N/A	N/A	14.4	B	N/A	N/A	N/A
			PM	10.9	B	14.4	B	N/A	N/A	N/A	16.7	C	N/A	N/A	N/A
10	Monterey Road/ Second Street	Signal	AM	10.7	B+	12.8	B	0.208	3.3	N/A	13.7	B	0.323	5.3	N/A
			PM	12.5	B	13.9	B	0.232	2.0	N/A	15.4	B	0.373	4.8	N/A
11	Monterey Road/ Third Street (us)	Side-Street Stop	AM	10.5	B	13.3	B	N/A	N/A	N/A	14.0	B	N/A	N/A	N/A
			PM	11.1	B	15.4	C	N/A	N/A	N/A	18.5	C	N/A	N/A	N/A
12	Monterey Road/ Fourth Street (us)	Side-Street Stop	AM	14.2	B	>150	F	N/A	N/A	No	43.9	E	N/A	N/A	No
			PM	18.9	C	>150	F	N/A	N/A	No	>150	F	N/A	N/A	No
13	Monterey Road/ Fifth Street (us)	Side-Street Stop	AM	17.9	C	57.5	F	N/A	N/A	No	67.0	F	N/A	N/A	No
			PM	17.0	C	>150	F	N/A	N/A	No	100.4	F	N/A	N/A	No
14	Monterey Road/ Dunne Avenue	Signal	AM	28.6	C	32.9	C-	0.206	5.6	N/A	34.6	C-	0.286	7.3	N/A
			PM	36.6	D+	37.9	D+	0.071	-3.6	N/A	46.2	**D**	**0.320**	**15.8**	N/A

Table 3.2-12
Existing and 2030 Project and Project Alternate Intersection Levels of Service

	Intersection	Traffic Control (Existing/ 2030 Project)	Peak Hour	Existing		2030 Project Conditions					2030 Project Alternate Conditions				
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?[5]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?
15	Del Monte Street/ Dunne Avenue (us)	Side-Street Stop	AM	12.0	B	16.0	C	N/A	N/A	N/A	19.6	C	N/A	N/A	N/A
			PM	15.0	B	21.4	C	N/A	N/A	N/A	26.2	D	N/A	N/A	N/A
16	Church Street/ Dunne Avenue	Signal	AM	18.8	B-	22.0	C+	0.096	2.3	N/A	23.2	C	0.138	5.2	N/A
			PM	19.5	B-	20.8	C+	0.133	2.7	N/A	22.2	C+	0.151	4.2	N/A
17	Butterfield Boulevard/ Dunne Avenue	Signal	AM	30.7	C	32.7	C-	0.006	1.1	N/A	32.8	C-	0.025	0.9	N/A
			PM	39.4	D	37.7	D+	-0.007	-2.9	N/A	37.9	D+	0.006	-2.8	N/A
18	US 101 SB Ramps/ Dunne Avenue	Signal	AM	20.7	C+	19.9	B-	0.130	1.5	N/A	20.3	C+	0.136	1.7	N/A
			PM	21.5	C+	23.0	C+	0.029	1.7	N/A	23.1	C	0.036	1.8	N/A
19	US 101 NB Ramps/ Dunne Avenue	Signal	AM	14.4	B	13.5	B	0.031	-0.9	N/A	13.6	B	0.028	-0.9	N/A
			PM	12.7	B	16.7	B	0.023	3.8	N/A	16.7	B	0.023	3.8	N/A
20	Condit Road/ Dunne Avenue	Signal	AM	32.7	C-	31.9	C	0.001	-0.4	N/A	31.9	C	-0.001	-0.4	N/A
			PM	28.3	C	32.8	C-	0.016	5.5	N/A	32.8	C-	0.016	5.5	N/A
21	Monterey Road/ Tennant Avenue	Signal	AM	25.6	C	33.5	C-	0.071	9.4	N/A	33.6	C-	0.047	8.6	N/A
			PM	32.8	C-	31.4	C	0.078	0.6	N/A	31.6	C	0.055	0.7	N/A
22	Butterfield Boulevard/ Main Avenue	Signal	AM	34.4	C-	37.0	D+	0.082	-0.8	N/A	36.6	D+	0.082	-1.7	N/A
			PM	37.7	D+	38.7	D+	0.177	4.2	N/A	**39.3**	**D**	0.174	2.3	N/A
23	Condit Road/ Main Avenue	Signal	AM	10.8	B+	10.9	B+	0.162	0.9	N/A	10.9	B+	0.162	0.9	N/A
			PM	9.9	A	8.6	A	0.167	-1.9	N/A	8.6	A	0.167	-1.9	N/A
24	Hale Avenue/Dunne Avenue (Future only)	Future Int./ All-Way Stop	AM	Future Intersection		20.9	C	0.691	20.9	N/A	28.6	D	0.796	28.6	N/A
			PM			15.1	C	0.486	15.1	N/A	21.5	C	0.742	21.5	N/A

Notes:
Significant impacts identified in **bold** text.
(us) = unsignalized intersection
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the *2000 HCM*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2] LOS = Level of service. LOS calculations conducted using the TRAFFIX LOS analysis software package.
[3] Change in the critical volume-to-capacity ratio (V/C) between Existing and 2030 Project Conditions and 2030 Project Alternate Conditions.
[4] Change in critical movement delay between Existing and 2030 Project Conditions and 2030 Project Alternate Conditions.
[5]Peak hour signal warrant analysis completed for unacceptable unsignalized intersection operations.
[6]No feasible improvements are available to provide LOS D+ or better operations due to building and right-of-way constraints.

2030 Project Alternate Levels of Service

The 2030 Project Alternate level of service analysis assumes the same amount of development and volume of traffic would occur in the Specific Plan project area, however, the roadway network within the project area would be different than in the City's General Plan. The 2030 Project Alternate roadway network is the same as the 2030 General Plan roadway network with the exception of the following two changes:

1) Monterey Road is narrowed from four to two lanes from Main Avenue to Dunne Avenue to potentially accommodate wider sidewalks, on-street parking, and streetscape improvements.

2) Maintain the existing roadway network at the Depot Street/Dunne Avenue intersection instead of closing Depot Street at Dunne Avenue to accommodate Dunne Avenue being built under the railroad crossing, located east of Depot Street, as called for in the current General Plan.

Intersection levels of service were calculated with the 2030 Project Alternate traffic volumes, and the results are summarized in Table 3.2-12. The results for existing conditions are included for comparison purposes, along with the projected increases in critical delay and critical volume-to-capacity (V/C) ratios. Critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection operations. The changes in critical delay and critical V/C ratios between existing and the project alternate conditions are used to identify significant impacts. In some instances, slight improvements in critical delay are reported due to the method the program uses to allocate green time to the various turning movements.

Under the 2030 Project Alternate conditions, the following three signalized intersections are projected to operate unacceptably (LOS D, E, or F) during one or both peak hours:

- Main Avenue/Monterey Road (LOS F, AM peak hour and LOS E, PM peak hour)
- Dunne Avenue/Monterey Road (LOS D, PM peak hour)
- Main Avenue/Butterfield Boulevard (LOS D, PM peak hour)

Under the 2030 Project Alternate conditions, the following five unsignalized study intersections are projected to operate unacceptably (LOS E or F) during one or both peak hours:

- Central Avenue/Monterey Road (LOS F, AM and PM peak hours)
- Main Avenue/Hale Avenue (LOS E, AM peak hour)
- Main Avenue/Depot Street (LOS E, AM peak hour and LOS F, PM peak hour)
- Fourth Street/Monterey Road (LOS E, AM peak hour and LOS F, PM peak hour)
- Fifth Street/Monterey Road (LOS F, AM and PM peak hours)

The remaining unsignalized study intersections are projected to operate at acceptable levels of service during both peak hours.

2030 Project Alternate Signal Warrant Analysis

Under 2030 Project Alternate conditions, the unsignalized study intersection of Main Avenue/Hale Avenue (during the AM peak hour) and Main Avenue/Depot Street (during both the AM and PM peak hours) would meet the peak-hour warrant criteria for signalization. The remaining unsignalized intersections operating at LOS E or F do not meet the peak-hour signalization criteria.

Impact TRANS-4a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Monterey Road intersection operations from LOS D to LOS F and LOS E during the AM and PM peak hours, respectively. **(Significant Impact)**

Impact TRANS-5a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Depot Street intersection operations from LOS C and D to LOS E and F during the AM and PM peak hours, respectively, and would meet the peak hour signal warrant criteria. **(Significant Impact)**

Impact TRANS-6a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Hale Avenue intersection operations from LOS B to LOS E during the AM peak hour and would meet the peak hour signal warrant criteria. **(Significant Impact)**

Impact TRANS-7a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Dunne Avenue/Monterey Road intersection operations from LOS D+ to LOS D during the PM peak hour. **(Significant Impact)**

Impact TRANS-8a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Butterfield Boulevard intersection operations from LOS D+ to LOS D during the PM peak hour. **(Significant Impact)**

2030 Freeway Segment Levels of Service

The estimated number of new trips added to the freeway segments under 2030 project conditions is shown in Table 3.2-13. The proposed project is expected to add between 0.12 and 0.54 percent of the capacity to the freeway study segments. The proposed project, therefore, would not add new trips greater than one percent of the freeway segment capacity to any of the study freeway segments and no additional freeway segment analysis is required for the proposed project.

As previously described, it should be noted that Caltrans has accepted the adopted CMP TIA methodologies, and it is appropriate to use the adopted CMP standard as the threshold of significance for impacts to the freeways.

It is also relevant to disclose, however, that Caltrans also states that it strives to maintain freeway facilities at the LOS C/D cusp per its *Guide for Preparation of Traffic Impact Studies* (December 2002). If the Caltrans LOS C/D was used as the threshold of significance for freeway impacts, then impacts to US 101 would be considered significant and unavoidable.

The Valley Transportation Authority and Caltrans are the responsible agencies for planning for and implementing improvements within the US 101 corridor. A fair share contribution from the City of Morgan Hill toward freeway improvement costs would be an acceptable mitigation measure; however, significant impacts are not reduced or eliminated until the freeway improvements are implemented. Additional sources would be needed to provide adequate funding, which can include State Transportation Improvement Program funds for projects identified in the Valley Transportation Plan 2030, impact fees from other jurisdictions, and/or a regional impact fee. The City has implemented an impact fee to develop some of the local Morgan Hill roadway improvement but does not have a funding strategy in place to contribute towards regional improvements, and there is no regional or state impact fee program established. City representatives do and will continue to work

collaboratively with San José, Gilroy, Santa Clara County, counties to the south (i.e. Monterey, San Benito, and Merced Counties), the Valley Transportation Authority, and Caltrans to prepare and develop a funding strategy for South County freeway improvements. Payment of traffic impact fees or a fair share contribution would be expected to fulfill the City's obligations for mitigating regional traffic impacts; however, unless other funding sources such as a new regional impact fee, additional sales tax measures, contributions from other developers, or state funds are made available, feasible freeway and regional improvements to meet the Caltrans freeway LOS standard will not be implemented. As previously stated, it is appropriate that this EIR is based on the adopted CMP threshold of significance for freeway impacts, but it can be noted that if the LOS "C/D cusp" standard desired by Caltrans were to be considered, then projects that cause traffic to be added to freeway segments that operate below that level would be considered to create significant and unavoidable impacts, given, as discussed above, that there is no identified regional feasible mitigation measure or program that would ensure that improvements are made to achieve Caltrans' desired level of service on the freeway segments.

Impact TRANS-9: The project would not significantly degrade the level of service or add more than one percent of the freeway segment's capacity to any of the study freeway segments and, therefore, would result in less than significant impacts to freeway segments in the project area under 2030 Specific Plan project conditions. **(Less Than Significant Impact)**

Table 3.2-13
Freeway Segment Levels of Service with 2030 Projected Development

Direction	From	To	Capacity	Peak Hour	Existing Conditions				2030 Conditions									
					Density		LOS		Trips Added		Density		LOS		% Added		Impact	
					MF	HOV	MF	HOV	MF	HOV	MF	HOV	MF	HOV	MF	HOV	MF	HOV
NB US 101	San Martin Avenue	Tennant Avenue	6,900	AM	59	N/A	F	N/A	16	N/A	59	N/A	F	N/A	0.23	N/A	No	N/A
				PM	17	N/A	B	N/A	37	N/A	17	N/A	B	N/A	0.54	N/A	No	N/A
	Tennant Avenue	Dunne Avenue	6,900	AM	71	N/A	F	N/A	10	N/A	71	N/A	F	N/A	0.14	N/A	No	N/A
				PM	16	N/A	B	N/A	25	N/A	16	N/A	B	N/A	0.36	N/A	No	N/A
	Dunne Avenue	Cochrane Road	6,900	AM	47	N/A	E	N/A	8	N/A	47	N/A	E	N/A	0.12	N/A	No	N/A
				PM	16	N/A	B	N/A	8	N/A	16	N/A	B	N/A	0.12	N/A	No	N/A
	Cochrane Road	Burnett Avenue	6,900	AM	34	18	D	B	28	5	34	18	D	C	0.41	0.28	No	No
				PM	17	5	B	A	27	3	17	5	B	A	0.40	0.15	No	No
SB US 101	Burnett Avenue	Cochrane Road	6,900	AM	14	N/A	B	N/A	27	N/A	14	N/A	B	N/A	0.39	N/A	No	N/A
				PM	66	N/A	F	N/A	30	N/A	66	N/A	F	N/A	0.43	N/A	No	N/A
	Cochrane Road	Dunne Avenue	6,900	AM	15	N/A	B	N/A	10	N/A	15	N/A	B	N/A	0.14	N/A	No	N/A
				PM	56	N/A	E	N/A	13	N/A	56	N/A	E	N/A	0.19	N/A	No	N/A
	Dunne Avenue	Tennant Avenue	6,900	AM	13	N/A	B	N/A	25	N/A	13	N/A	B	N/A	0.36	N/A	No	N/A
				PM	28	N/A	D	N/A	11	N/A	28	N/A	D	N/A	0.16	N/A	No	N/A
	Tennant Avenue	San Martin Avenue	6,900	AM	10	N/A	A	N/A	25	N/A	10	N/A	A	N/A	0.36	N/A	No	N/A
				PM	32	N/A	D	N/A	29	N/A	32	N/A	D	N/A	0.42	N/A	No	N/A

Notes:
[1] Density based on volume from VTA's *2007 CMP Monitoring Data*.
[2] NB – Northbound; SB - Southbound.
[3] MF – Mix-Flow; HOV – High-Occupancy Vehicle
Significant impacts identified in **bold** text.

3.2.2.4 *Parking*

The following discussion is based upon the *Downtown Parking Resources Management Strategy* prepared by DKS Associates in July 2008. A copy of this study is included as Appendix D in the draft Downtown Specific Plan (refer to Appendix B of this EIR). This parking analysis is based on development assumptions in the Downtown Core (Blocks 1-14) as identified in the Specific Plan.

Projected Parking Supply and Demand

Existing Parking Supply

Based on a 2004 parking survey, there are approximately 760 off-street parking spaces and 477 on-street parking spaces for a total of 1,237 spaces in the Downtown.[9] Since the 2004, 28 spaces on Depot Street have been removed as part of a street improvement project.

Projected Demand and Supply by 2015

Adjusted parking generation rates specific to the Downtown area were used by *DKS Associates* to estimate parking demand within the 14-block Downtown Core area. The parking generation rates and total parking demand estimates for existing and near-term 2015 conditions are shown in Table 3.2-14. The total parking demand in 2015 would be approximately 1,232 for retail and office land uses. New residential uses are anticipated to provide adequate off-street parking in accordance with zoning requirements.

Table 3.2-14
Parking Generation Rates and Parking Demand Estimates

Land Use	Parking Rates (per 1,000 sf)	Existing		2015		2030	
		Size	Demand	Size	Demand	Size	Demand
Retail	2.86	123,365	353	217,586	622	289,855	829
Office	4.0	122,248	489	152,405	610	182,839	731
Retail and Office Demand			842		1,232		1,560
Residential	--	193	--	546	--	874	--

By 2015, approximately 154 existing off street parking spaces may be lost on Blocks 2, 3, and 4 as sites redevelop with retail uses. In addition, 26 on-street parking spaces on the south side of Third Street would be removed as part of the impending Third Street improvements. An estimated 103 vehicles from existing residential uses would occupy on-street parking spaces, further reducing available parking capacity in the Downtown. The existing parking supply is estimated to be 926 spaces within the Downtown Core by 2015, resulting in a parking shortfall of 306 parking spaces (refer to Table 3.2-15). Parking spaces in the immediate vicinity of Blocks 2, 3, 4 and 7 are likely to be fully occupied.

[9] There are 232 parking spaces at the community center and 467 spaces at the Caltrain parking lot; because the availability of these spaces for retail and office uses is not known, these spaces are not counted as a part of the overall parking supply. Only spaces on the west side of Depot Street were included in the original parking space inventory and analyzed by the Parking Strategy.

Table 3.2-15
Retail and Office Parking Supply and Demand

Year	Estimated Demand*	Estimated Parking Supply			Parking Shortfall	
		Off-Street	On-Street	Total	Off-Street Only	Total
Existing	842	760	320	1,080	-92	+238
2015	1,232	606	320	926	-636	-306
2030	1,560	432	320	752	-1,138	-808

*Total of Retail and Office Demand. Assumes Residential parking provided by individual developments.

Projected Demand and Supply by 2030

The total parking demand estimates for long-term 2030 conditions are shown in Tables 3.2-14 and 3.2-15. The total parking demand in 2030 would be approximately 1,560 for retail and office land uses. New residential uses are anticipated to provide adequate off-street parking in accordance with zoning requirements.

Compared to the parking supply in 2015, developments in the Downtown Core area by 2030 may reduce the number of off-street parking spaces by 174. The total supply of parking spaces in 2030 is estimated to be 752 spaces.

Strategies for Future Parking Improvements

The Specific Plan describes several long-term strategies to create additional public parking supplies. These include converting private parking to public parking by acquiring private parking resources (refer to Figure 9) and improving the lots and building a grade-separated pedestrian crossing over the UPRR tracks to provide access to parking located east of the tracks near the Caltrain Station. In addition, construction of public parking structures may be considered, if warranted. The provision of new parking may funded through developer in-lieu fees, a Parking Assessment District, revenue from new parking meters, or a combination of these sources. The Redevelopment Agency also has recently allocated funds for increasing the supply of Downtown public parking. The City acquired the existing warehouse property on the southeast corner of Depot Street and Third Street and constructed a 97 space surface parking lot (completed in May 2009) to offset the loss of parking spaces due to the proposed Third Street improvements. As stated in the Specific Plan, the City of Morgan Hill intends to acquire and improve public parking supply prior to the occupancy of new developments. If parking is not available, new business would be less likely to locate in the Downtown, reducing the parking demand until the parking supply was increased.

Impact TRANS-10: While implementation of some or all of the parking strategies outlined in the Specific Plan would increase parking supply in the Downtown to meet parking demand as development in the Downtown Core intensifies, the City has no adopted program to monitor parking availability and undertake measures to provide adequate supply. **(Significant Impact)**

3.2.3 Mitigation and Avoidance Measures

In order to reduce the project impact to less than significant, mitigation must either return an intersection to an acceptable level of service (LOS D+ or better), or it must improve the intersection's operating condition to at least the level it would be without the project (thus offsetting the impact of

the project). Even if the intersection would then operate below an acceptable LOS D+, a project cannot be required to mitigate conditions for which it is not responsible.

Note: Mitigation measures denoted with a lower case "a" (for example MM TRANS-1a.1) apply to the Downtown Specific Plan Project Alternate only. All other measures are for the proposed Downtown Specific Plan.

3.2.3.1 *Mitigation for 2015 Intersection LOS Impacts*

MM TRANS-1.1: Monterey Road/Main Avenue. The addition of 2015 project traffic volumes would exacerbate LOS D intersection operations during the AM peak hour. The mitigation required to reduce the impact from the proposed project to less than significant during the AM peak hour would be to provide for Main Avenue protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening of the westbound approach (i.e., a separate left, through, and right lane with an overlap phase).

The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable.

MM TRANS-1a.1: Monterey Road/Main Avenue. The addition of 2015 traffic volumes on the project alternate roadway network would exacerbate LOS D intersection operations to LOS F and LOS D- during the AM and PM peak hours, respectively. The mitigation required to reduce the impact from the project alternate to less than significant during the AM and PM peak hours would be to provide for Main Avenue protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening of the westbound approach (i.e., a separate left, through, and right lane with an overlap phase). The southbound approach would need to be widened to include two southbound left-turn lanes, a through lane, and a right-turn lane. These improvements would not conflict with the narrowing of Monterey Road from four to two lanes.

The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-

friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable.

MM TRANS-2a.1: Monterey Road/Dunne Avenue. The addition of 2015 traffic volumes on the project alternate roadway network would degrade acceptable (LOS D+) operations to LOS D operations during the PM peak hour. The mitigation required to reduce the impact from the project alternate to a less than significant level during the PM peak hour would be to provide for Dunne Avenue an eastbound right-turn overlap phase and a southbound approach with a left-turn, through lane and shared through-right lane. This configuration would be inconsistent with narrowing Monterey Road from four to two lanes between Dunne Avenue to Fifth Street and would require modification of the narrowing proposed under the Project Alternate to retain four lanes on Monterey Road between Dunne Avenue and Fifth Street.

During a future Monterey Road streetscape planning process, the City of Morgan Hill should explore feasibility and desirability of retaining additional lanes in the block of Monterey Road between Dunne Avenue and Fifth Street; however, with the current project alternate roadway network, the impact at this intersection is significant and unavoidable.

3.2.3.2 *Mitigation for 2030 Intersection LOS Impacts*

MM TRANS-4.1: Monterey Road/Main Avenue. The addition of 2030 traffic volumes would degrade the Monterey Road and Main Avenue intersection operations from LOS D to LOS E and LOS D- during the AM and PM peak hours, respectively. To mitigate this impact, Main Avenue would need protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening of the westbound approach (i.e., separate left, through, and right lane with an overlap phase).

The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable.

MM TRANS-4a.1: Monterey Road/Main Avenue. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the Monterey Road and Main Avenue intersection operations from LOS D to LOS F and LOS E during the AM and PM peak hours, respectively. To mitigate this impact, Main Avenue would need protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening the westbound approach (i.e., separate left, through, and right lane with an overlap phase). The southbound approach would also need to be widened (i.e. two southbound left-turn lanes, a through-lane, and a right-lane) and the northbound approach would require a northbound left-turn lane, a through-lane, and a shared through-right lane. The northbound approach would conflict with the potential narrowing of Monterey Road from four to two lanes between Main Avenue and Dunne Avenue.

The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable.

MM TRANS-5.1: Depot Street/Main Avenue. The addition of 2030 traffic volumes would degrade the Depot Street/Main Avenue intersection operations from LOS C to LOS E during the AM peak hour and the peak-hour signal warrant would be met. Signalizing this intersection would mitigate this impact to a less than significant level. It should be noted that signalization at this location was recommended in the Circulation Element update that is currently in progress.

The City of Morgan Hill will monitor traffic at this location and provide for installation of a signal or make other improvements at the time the intersection is projected to operate at an unacceptable level and meet signal warrants.

MM TRANS-5a.1: Main Avenue/Depot Street. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the Main Avenue and Depot Street intersection from LOS C and LOS E to an unacceptable LOS E and LOS F during the AM and PM peak hours, respectively. In addition, the peak hour warrant is exceeded during both peak hours. Providing a signal at this location would reduce this impact to a less than significant level and provide acceptable (LOS D+ or better) operations during both peak hours. It should be noted that the recommendation for a signal is also identified in the recommended roadway network for the General Plan Circulation Element update that is currently in progress.

The City of Morgan Hill will monitor traffic at this location and provide for installation of a signal or make other improvements at the time the intersection is projected to operate at an unacceptable level and meet signal warrants.

MM TRANS-6a.1: Main Avenue/Hale Avenue. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the intersection of Main Avenue and Hale Avenue from LOS B to an unacceptable LOS E during the AM peak hour. In addition, the peak hour warrant is exceeded during the AM peak hour. Providing a signal at this location would reduce this impact to a less than significant level and provide acceptable (LOS D+ or better) operations during both peak hours. It should be noted that the recommendation for a signal is also identified in the recommended roadway network for the General Plan Circulation Element update that is currently in progress.

The City of Morgan Hill will monitor traffic at this location and provide for installation of a signal or make other improvements at the time the intersection is projected to operate at an unacceptable level and meet signal warrants.

MM TRANS-7a.1: Dunne Avenue/Monterey Road. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the intersection of Monterey Road and Dunne Avenue from an acceptable LOS D+ to an unacceptable LOS during the PM peak hour. The mitigation required to reduce the impact from the project alternate to a less than significant level during the PM peak hour would be to provide an eastbound right-turn overlap phase, and a southbound approach with a left-turn, through lane and shared through-right lane to operate acceptably (LOS D+ or better). This configuration would be inconsistent with narrowing Monterey Road from four to two lanes between Dunne Avenue to Fifth Street and would require modification of the narrowing proposed under the Project Alternate.

During a future Monterey Road streetscape planning process, the City of Morgan Hill could explore feasibility and desirability of retaining additional lanes in the block of Monterey Road between Dunne Avenue to Fifth Street; however, with the current project alternate roadway network, the impact at this intersection is significant and unavoidable.

MM TRANS-8a.1: Main Avenue/Butterfield Boulevard. The addition of 2030 traffic volumes on the project alternate roadway network would degrade the intersection of Main Avenue/Butterfield Boulevard from an acceptable LOS D+ to an unacceptable level of service LOS D during the PM peak hour. This intersection requires a second northbound left-turn to operate acceptably. However, this improvement may require right-of-way from the northwest and southeast corners of the intersection, and physical constraints exist along the east side of Butterfield Boulevard due to the open canal. Overall, the implementation of a second northbound left-turn lane is considered physically feasible and would mitigate this impact to a less than significant level. The City of Morgan Hill will monitor traffic at this location and make

necessary improvements at the time the intersection is projected to operate at an unacceptable level.

3.2.3.3 *Mitigation for Parking Impacts*

MM TRANS-10.1: The City shall create a land use and parking database for the downtown area and shall be required to document the demand for parking from retail and office development and changes in parking supply through the preparation of a monitoring report submitted to the City Council every two years to ensure planning, regulatory, and construction measures are undertaken to provide adequate parking supply. Implementation of this measure would reduce the impact of the Specific Plan development on parking supplies to a less than significant level.

3.2.4 Conclusion

Impact TRANS-1:	Under 2015 conditions, the proposed project would exacerbate LOS D intersection operations at Monterey Road/Main Avenue during the AM peak hour.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-1.1
Impact After Mitigation	Significant Unavoidable Impact

Impact TRANS-1a:	Under 2015 conditions, the project alternate would result in impacts to the intersection of Monterey Road/Main Avenue (LOS F during AM and LOS D- during PM).
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-1a.1
Impact After Mitigation	Significant Unavoidable Impact

Impact TRANS-2a:	Under 2015 conditions, the project alternate would result in impacts to the intersection of Dunne Avenue/Monterey Road (LOS D during PM).
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-2a.1
Impact After Mitigation	Significant Unavoidable Impact

Impact TRANS-3:	The project would not significantly degrade the level of service or add more than one percent of the freeway segment's capacity to any of the study freeway segments and, therefore, would have less than significant impacts to study freeway segments under 2015 conditions.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact TRANS-4:	The proposed Specific Plan, under 2030 conditions, would degrade Monterey Road/Main Avenue intersection operations from LOS D to LOS E and LOS D- during the AM and PM peak hours, respectively.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-4.1
Impact After Mitigation	Significant Unavoidable Impact

Impact TRANS-4a:	The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Monterey Road intersection operations from LOS D to LOS F and LOS E during the AM and PM peak hours, respectively.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-4a.1
Impact After Mitigation	Significant Unavoidable Impact

Impact TRANS-5:	The proposed Specific Plan, under 2030 conditions, would degrade Depot Street/Main Avenue intersection operations from LOS C to LOS E during the AM peak hour and would meet the peak hour signal warrant criteria.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-5.1
Impact After Mitigation	Less Than Significant

Impact TRANS-5a:	The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Depot Street intersection operations from LOS C and D to LOS E and F during the AM and PM peak hours, respectively, and would meet the peak hour signal warrant criteria.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-5a.1
Impact After Mitigation	Less Than Significant

Impact TRANS-6a:	The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Hale Avenue intersection operations from LOS B to LOS E during the AM peak hour and would meet the peak hour signal warrant criteria.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-6a.1
Impact After Mitigation	Less Than Significant

Impact TRANS-7a:	The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Dunne Avenue/Monterey Road intersection operations from LOS D+ to LOS D during the PM peak hour.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-7a.1
Impact After Mitigation	Significant Unavoidable Impact

Impact TRANS-8a:	The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Butterfield Boulevard intersection operations from LOS D+ to LOS D during the PM peak hour.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-8a.1
Impact After Mitigation	Less Than Significant

Impact TRANS-9:	The project would not significantly degrade the level of service or add more than one percent of the freeway segment's capacity to any of the study freeway segments and, therefore, would result in less than significant impacts to freeway segments in the project area under 2030 Specific Plan project conditions.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact TRANS-10:	While implementation of some or all of the parking strategies outlined in the Specific Plan would increase parking supply in the Downtown to meet parking demand as development in the Downtown Core intensifies, the City has no adopted program to monitor parking availability and undertake measures to provide adequate supply.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM TRANS-10.1
Impact After Mitigation	Less Than Significant

3.3 NOISE AND VIBRATION

The following discussion is based on an Environmental Noise Assessment prepared for the project by *Illingworth & Rodkin, Inc.* in July 2009. A copy of this report is included as Appendix D in this EIR.

3.3.1 Existing Setting

3.3.1.1 *Fundamentals of Environmental Noise*

Noise is measured in "decibels" (dB) which is a numerical expression of sound levels on a logarithmic scale. A noise level that is ten dB higher than another noise level has ten times as much sound energy and is perceived as being twice as loud. Sounds less than five dB are just barely audible and then only in absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only a brief exposure. These extremes are not commonplace in our normal working and living environments. An "A-weighted decibel" (dBA) filters out some of the low and high pitches which are not as audible to the human ear. Thus, noise impact analyses commonly use the dBA. Typical A-weighted levels measured in the environment and in industry are shown in Table 3.3-1.

Table 3.3-1
Typical Sound Levels Measured in the Environment

Common Outdoor Noise Source	Noise Level (dBA)	Common Indoor Noise Source
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters	100 dBA	
		Night club with live music
	90 dBA	
Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70 dBA	Vacuum cleaner at 3 meters
Commercial/Urban area daytime		Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	
	10 dBA	Quiet recording studio
Threshold of human hearing	0 dBA	Threshold of human hearing

Since excessive noise levels can adversely affect human activities (such as conversation, sleeping and human health) federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as L_{eq}, L_{dn}, or CNEL.[10] Using one of these descriptors is a way for a location's overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows or in the middle of the night).

3.3.1.2 *Applicable Noise Standards and Policies*

Morgan Hill General Plan

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating noise impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Noise Policy 7a* – New Development Shall Meet Acceptable Exterior Noise Level Standards
- *Noise Policy 7b* – Evaluate Impact of Development Projects on Existing Noise Levels
- *Noise Policy 7d* – Interior Noise Level Standards for Offices
- *Noise Policy 7e* – Increased Traffic Noise Levels Significance Thresholds
- *Noise Policy 7f* – Stationary Noise Sources Should Not Exceed Ambient Noise Levels

The City of Morgan Hill General Plan Acceptable Noise Level standards (Noise Policy 7a) state that the normally acceptable interior noise level for residential uses is 45 dBA L_{dn}. The City's standards for exterior noise levels are 60 dBA L_{dn} in single-family residential use areas and multi-family recreation areas, 65 dBA L_{dn} in multi-family residential use areas, and 70 dBA L_{dn} for residential uses near a railroad. Noise levels in a new residential development exposed to an exterior L_{dn} of 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous noise levels in all other habitable rooms should not exceed 55 dBA.

Under General Plan Noise Policy 7e, noise level increases resulting from traffic associated with new development shall be considered significant if the noise level increase is five dBA L_{dn} or greater where future noise levels are less than 60 dBA L_{dn} or the noise level increase is three dBA L_{dn} or greater where future noise levels are 60 dBA L_{dn} or greater.

Morgan Hill Municipal Code

The City of Morgan Hill also limits nuisances caused by excessive noise through the Municipal Code. The City of Morgan Hill Municipal Code, Chapter 8.28.040, limits construction activities to the hours of 7:00 a.m. to 8:00 p.m., Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities should occur on Sundays or federal holidays. The Municipal Code, Chapter 18.48.075, also limits maximum noise levels when adjacent to various

[10] L_{eq} stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. L_{dn} stands for Day-Night Level and is a 24-hour average of noise levels, with 10-dB penalties applied to noise occurring between 10 PM and 7 AM. CNEL stands for Community Noise Equivalent Level; it is similar to the L_{dn} except that there is an additional five-dB penalty applied to noise which occurs between 7 PM and 10 PM. As a general rule of thumb where traffic noise predominates, the CNEL and L_{dn} are typically within two dBA of the peak-hour L_{eq}.

uses. These standards include limiting the maximum sound generated by any use at the lot line to seventy to seventy-five dBA when adjacent to industrial or wholesale uses, sixty-five to seventy dbA when adjacent to offices, retail or sensitive industries, and sixty dbA when adjacent or contiguous to residential, park or institutional uses, the maximum sound level shall not exceed. Excluded from these standards are occasional sounds generated by the movement of railroad equipment, temporary construction activities, or warning devices.

2007 California Building Code

Multi-family housing in the State of California is subject to the environmental noise limits set forth in the 2007 California Building Code (Chapter 12, Appendix Section 1207.11.2). The noise limit is a maximum interior noise level of 45 dBA L_{dn}. Where exterior noise levels exceed 60 dBA L_{dn}, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the noise limit.

CEQA Guidelines

CEQA does not define what noise level increases are considered significant. Consistent with the City's General Plan Noise Element, project-generated noise level increases of three dBA L_{dn} or greater would be considered significant where exterior noise levels would exceed the normally acceptable noise level standard (60 dBA L_{dn}) and where noise levels would remain at or below the normally acceptable noise level standard with the project, noise level increases of five dBA L_{dn} or greater would be considered significant.

3.3.1.3 *Existing Noise Levels*

Downtown Morgan Hill is subject to noise from railroad trains along the Union Pacific Railroad (UPRR) and from vehicles along area roadways. The primary north-south routes are Monterey Road and Butterfield Boulevard. Main Avenue and Dunne Avenue are the primary west-east routes.

Table 3.3-2 summarizes approximate noise level contours along the primary transportation routes through the downtown. These contours are based on recent noise measurements made by *Illingworth & Rodkin, Inc*. for this project and other recent projects within the Specific Plan project area and vicinity[11]. All data were normalized to a reference distance of 100 feet from the center of the roadway or railroad tracks.

Railroad operations along the UPRR generate the highest noise levels. Caltrain operates six commuter trains through Morgan Hill on weekdays and freight trains use the tracks on an as needed basis. Railroad trains are required to sound their warning whistles within one-quarter mile of at-grade railroad crossings in the downtown area, and given the many crossings in the downtown area, these high maximum instantaneous noise levels, ranging from approximately 90 to 110 dBA L_{max}, occur on a frequent basis during passby events. The day-night average noise level is highly influenced by these high maximum noise events, particularly those that occur during the hours between 10:00 PM and 7:00 AM. Day-night average noise levels are approximately 84 dBA L_{dn} at the railroad right-of-way and the 70 dBA L_{dn} noise contour lies approximately 320 feet from the tracks assuming no intervening shielding.

[11] Illingworth & Rodkin, Inc., Horizons Senior Housing Environmental Noise Assessment, February 13, 2008, and Illingworth & Rodkin, Inc., Huntington Square Residential Project Environmental Noise Assessment, April 11, 2007.

Within the Specific Plan project area, in blocks not directly adjacent to the UPRR tracks, railroad train warning whistle noise levels are similar to typical maximum noise levels from local roadway traffic. In these areas, local traffic becomes the predominant noise source. Monterey Road and Butterfield Boulevard generate day-night average noise levels of 68 dBA L_{dn} at a distance of 100 feet from the roadway centerline. The 60 dBA L_{dn} noise contour is located approximately 340 feet from the center of these roadways. The 60 dBA L_{dn} noise contours for Main Avenue and Dunne Avenue, where traffic volumes are less, are 160 feet and 140 feet from the roadway center, respectively. Traffic noise levels along lesser traveled roadways in and around the Specific Plan Area are less than 60 dBA L_{dn}.

Table 3.3-2
Existing Noise Contours

Noise Source	L_{dn} at 100 feet (dBA)	Distance to Noise Contour (feet)		
		70 L_{dn} (dBA)	65 L_{dn} (dBA)	60 L_{dn} (dBA)
UPRR	80	320	560	1,000
Monterey Road	68	70	160	340
Butterfield Boulevard	68	70	160	340
Main Avenue	63	--	70	160
Dunne Avenue west of Monterey Road	62	--	60	140
Dunne Avenue east of Monterey Road	64	--	90	180

3.3.1.4 *Fundamentals of Groundborne Vibration*

Railroad operations are potential sources of substantial ground vibration depending on distance, the type and the speed of trains, and the type of railroad track. Ground vibration from passing trains consists of rapidly fluctuating motions or waves, which are also measured in decibels.[12] The abbreviation "VdB" is used in this document for vibration decibels to reduce confusion with sound decibels.

Typical background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold of perception for most humans. Perceptible vibration levels inside residences are attributed to the operation of heating and air conditioning systems, door slams and foot traffic. Construction activities, train operations, and street traffic are some of the most common external sources of vibration that can be perceptible inside residences. Table 3.3-3, on the following page, illustrates some common sources of vibration and the association to human perception or the potential for structural damage.

[12] Decibels of ground vibration refer to peak vertical velocities of the floors of affected structures. In contrast, sound decibels refer to the time-averaged magnitudes of fluctuations in air pressure levels.

Table 3.3-3
Typical Levels of Groundborne Vibration

Human/Structural Response	Velocity Level, VdB (re 1µ inch/sec, RMS)	Typical Events (50 –foot setback)
Threshold, minor cosmetic damage	100	Blasting, pile driving, vibratory compaction equipment Heavy tracked vehicles (Bulldozers, cranes, drill rigs)
Difficulty with tasks such as reading a video or computer screen	90	Commuter rail, upper range
Residential annoyance, infrequent events	80	Rapid transit, upper range
Residential annoyance, frequent events	70	Commuter rail, typical bus or truck over bump or on rough roads Rapid transit, typical
Approximate human threshold of perception to vibration	60	Buses, trucks and heavy street traffic Background vibration in residential settings in the absence of activity
Lower limit for equipment ultra-sensitive to vibration	50	

Note: The reference velocity for groundborne vibration is 1 x 10^{-6} inches per second (1µ inch/sec) RMS, which equals 0 VdB, and 1 in./sec. equals 120 VdB.
Source: Illingworth & Rodkin, Inc. and U.S. Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006, FTA-VA-90-1003-06.

3.3.1.5 *Applicable Vibration Standards*

The City of Morgan Hill has not identified quantifiable vibration limits that can be used to evaluate the compatibility of land uses with vibration levels experienced at a project site. Although there are no local standards that control the allowable vibration in a new residential development, the U.S. Department of Transportation has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The Federal Transit Administration (FTA) has proposed vibration impact criteria, based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 3.3-4, on the following page. Note that there are criteria for frequent events (more than 70 events of the same source per day), occasional events (30 to 70 vibration events of the same source per day), and infrequent events (less than 30 vibration events of the same source per day).

Table 3.3-4
Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Limits (VdB re 1µ inch/sec, RMS)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1 Buildings where vibration would interfere with interior operations	65 VdB[4]	65 VdB[4]	65 VdB[4]
Category 2 Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category 3 Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB

Notes:
[1]"Frequent Events" is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.
[2]"Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
[3]"Infrequent Events" is defined as fewer than 30 vibration events per day. This category includes most commuter rail branch lines.
[4]This limit is based on levels that acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research should always require detailed evaluation to define the acceptable vibration limits. Ensuring low vibration levels in a building requires special design of HVAC systems and stiffened floors.

Source: U.S. Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006, FTA-VA-90-1003-06.

3.3.1.6 *Existing Vibration Levels*

Vibration levels at properties adjoining the UPRR are dependent on the type, speed, and weight of the particular train passing the property, as well as the type and condition of train's wheels. Track conditions, soil type, and foundation type also affect the propagation of vibration from the tracks to the receiver. Data collected by *Illingworth & Rodkin, Inc.* since 2007 indicates that vibration levels in the downtown area typically range from 66 to 70 VdB at a distance of 100 feet from the center of the tracks. Currently, there are approximately 20 vibration events per weekday considering the six daily Caltrain commuter trains and a variable number of freight trains. Vibration levels at residences 25 feet or more from the tracks are considered acceptable under the FTA criteria shown above in Table 3.3-4.

3.3.2 Noise and Vibration Impacts

3.3.2.1 *Thresholds of Significance*

For the purposes of this EIR, a noise and vibration impact is considered significant if the project would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels; or

- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The following discussion addresses noise and vibration impacts in 2030 for projected development allowed under the proposed Downtown Specific Plan.

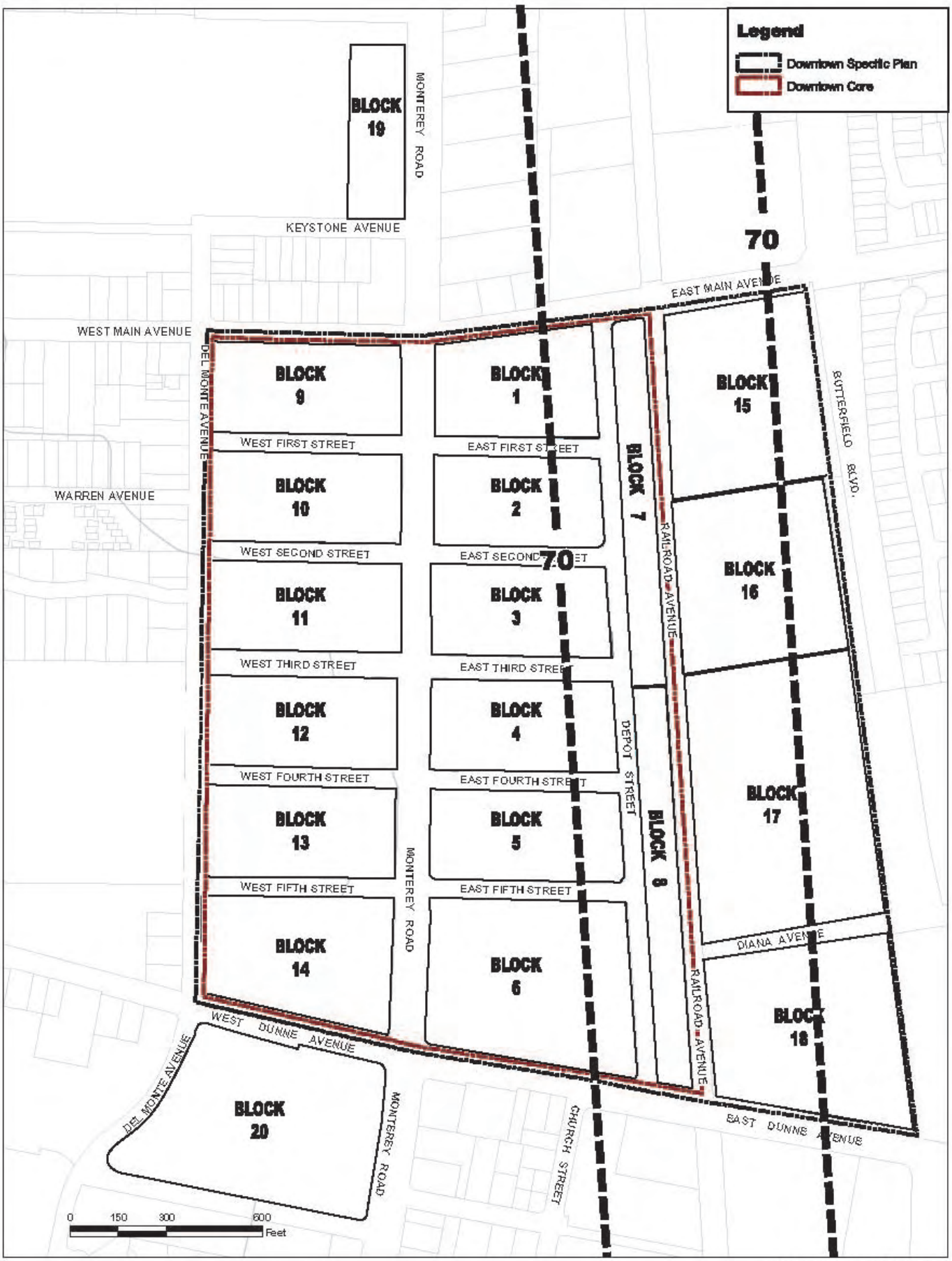
3.3.2.2 *Noise Impacts to Development in the Project Area*

Exterior Noise Levels

Railroad Noise

As previously discussed, Caltrain operates commuter rail service through Morgan Hill and the Specific Plan project area along the UPRR right-of-way. Rail traffic along the conventional railroad line is anticipated to increase with the planned Caltrain South County Commuter Rail project and other growth in rail service over the next 17 years (2025). The Caltrain expansion project would install 16.5 miles of double-track on the UPRR between the Coyote Valley area of South San José and Gilroy by 2012. The project would increase the number of headways through downtown Morgan Hill in any given hour, but would not necessarily result in substantially higher noise levels. A worst-case estimate would assume that noise levels at a distance of 100 feet would increase by approximately one dBA L_{dn}, to 81 dBA L_{dn}. Maximum noise levels would be expected to be similar to existing conditions. Figure 17 shows the estimated 70 dBA L_{dn} railroad train noise contour in 2030.

A High-Speed Train project is also envisioned along the UPRR right-of-way through downtown Morgan Hill. The characteristics of this pending project are discussed in *Section 5.0 Cumulative Impacts*.



Source: City of Morgan Hill

FUTURE 70 DBA LDN TRAIN NOISE CONTOUR

FIGURE 17

Traffic Noise

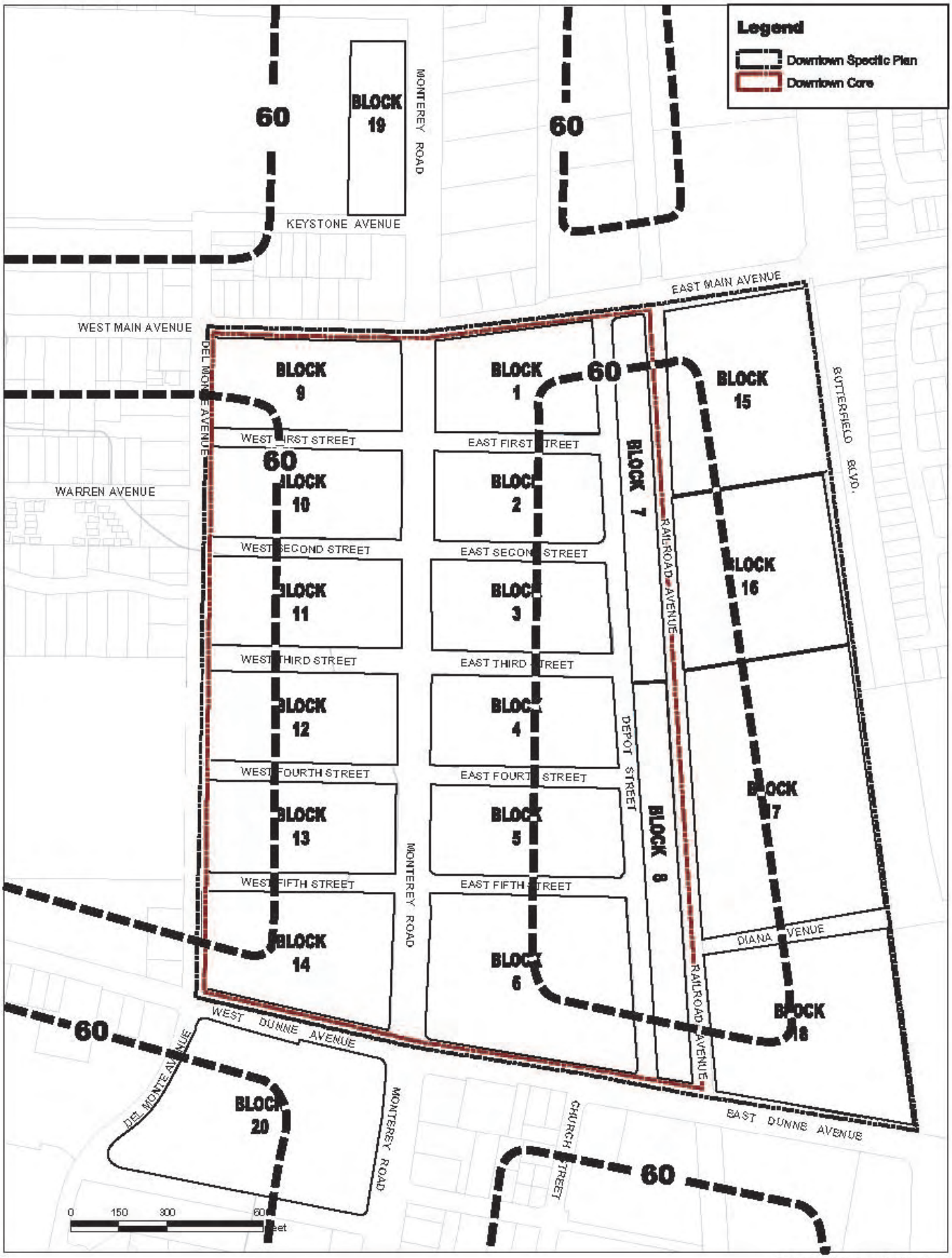
In 2030, traffic noise in the downtown area will continue to be generated as a result of traffic along the primary north-south and west-east routes. Changes to the existing circulation network under the Project and Project Alternate would not result in substantially different noise levels unless the alignment of the travel lanes were shifted or speeds due to the changes increase or decrease by five miles per hour or more.[13] Noise levels along lesser-traveled streets will continue to be less than 60 dBA L_{dn} at 100 feet from the center of the roadway. Figure 18 shows the estimated 60 dBA L_{dn} traffic noise contours in 2030.

A summary of the approximate noise level contours along the primary transportation routes through the downtown is shown in Table 3.3-5, below. This data is based on adjustments made to the existing traffic data assuming increased traffic in the project area, including projected Specific Plan development, in 2030. Noise levels in 2015 would be lower than shown in Table 3.3-5 due to a lesser amount of development at that time.

Table 3.3-5
Future 2030 Noise Contours

Noise Source	Existing 2007 L_{dn} at 100 (dBA)	L_{dn} at 100 (dBA)	Distance to Noise Contour (feet)		
			70 L_{dn} (dBA)	65 L_{dn} (dBA)	60 L_{dn} (dBA)
UPRR	80	81	350	630	1,120
Monterey Road (Central Avenue to Main Avenue)	68	70	100	220	460
Monterey Road (Main Ave to Dunne Avenue)	68	69	90	180	400
Butterfield Boulevard (Central Ave to Dunne Avenue)	68	70	100	220	460
Main Avenue (West of Monterey Road)	63	65	50	100	220
Main Avenue (Monterey Road to Butterfield Boulevard)	63	66	50	120	250
Dunne Avenue (West of Monterey Road)	62	64	--	90	180
Dunne Avenue (Monterey Road to Butterfield Boulevard)	64	65	50	100	220

[13] Michael Thill, Illingworth & Rodkin. Email Re: Morgan Hill Downtown Specific Plan. April 29, 2009.



Source: City of Morgan Hill

FUTURE 60 DBA LDN TRAFFIC NOISE CONTOUR FIGURE 18

Traffic noise levels along Monterey Road are calculated to increase by approximately two dBA L_{dn} between Central Avenue and Main Avenue and by approximately one dBA L_{dn} between Main Avenue and Dunne Avenue. Day-night average noise levels along Monterey Road are calculated to reach 70 dBA L_{dn} between Central Avenue and Main Avenue and 69 dBA L_{dn} between Main Avenue and Dunne Avenue at 100 feet from the roadway centerline. Traffic noise levels along Butterfield Boulevard are anticipated to increase by two dBA L_{dn} to 70 dBA L_{dn} at a distance of 100 feet from the roadway centerline between Central Avenue and Dunne Avenue.

Main Avenue would be subject to traffic noise increases of approximately two dBA L_{dn} west of Monterey Road and three dBA L_{dn} between Monterey Road and Butterfield Boulevard. Traffic noise levels would reach 65 to 66 dBA L_{dn} at a distance of 100 feet from the centerline. Future traffic noise levels at a distance of 100 feet from the center of Dunne Avenue are calculated to increase to 64 dBA L_{dn} west of Monterey Road and 65 dBA L_{dn} between Monterey Road and Butterfield Boulevard. The contribution to traffic noise increases resulting from projected 2015 and 2030 development are discussed in Section 3.3.2.4.

Impact NV-1: Residential development proposed under the Downtown Specific Plan would be exposed to exterior noise levels exceeding 60 dBA L_{dn} from traffic noise and 70 dBA L_{dn} from railroad noise. Exterior noise levels exceeding the acceptable General Plan standards would result in significant impacts to outdoor spaces in new residential development in the Downtown. **(Significant Impact)**

Interior Noise Levels

Exterior ambient noise levels in the Downtown from railroad and traffic noise sources may result in interior noise levels exceeding State and local standards. Typical wood frame construction techniques with standard thermal insulating glass in moderately sized closed windows (less than one-third of the exterior wall area) typically reduce interior noise levels by about 25 dBA. When windows are opened, noise attenuation from exterior to interior is reduced to an average of 15 dBA. In addition, maximum instantaneous noise levels (L_{max}) from train warning whistles at at-grade crossings, range from approximately 90 to 110 dBA L_{max}.

Standard Measures: The following standard measures would reduce interior noise levels in new residences:

SM NV-1: Project-specific acoustical analyses are mandated by the State for multi-family uses where noise levels exceed 60 dBA L_{dn}. The acoustical analyses shall demonstrate that interior noise levels in residences will be reduced to 45 dBA L_{dn} or lower to meet State and local standards.

Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required for new residential uses adjacent to the UPRR, Monterey Road, or Butterfield Boulevard. Building sound insulation requirements include the provision of forced-air mechanical ventilation for all units, so that windows could be kept closed at the occupant's discretion to control noise.

The specific determination of what treatments are necessary would be conducted on a unit-by-unit basis. Results of the acoustical analysis,

including the description of the necessary noise control treatments, shall be submitted to the Building Official along with the building plans and approved prior to issuance of a site development permit or building permit.

Impact NV-2: Interior noise levels would be reduced through the incorporation of standard measures, however, L_{max} noise levels of up to 110 dBA from train warning whistles, would exceed the City's L_{max} noise guidelines in the General Plan. **(Significant Impact)**

3.3.2.3 *Impacts to Development in the Project Area from Groundborne Vibration*

Rail traffic along the conventional railroad line is anticipated to increase to 30 trains or more per day with the planned Caltrain expansion project through 2025 and other growth in rail service, but would not exceed 70 trains per day. Train activity would be considered "occasional" with respect to the FTA vibration impact criteria. Data gathered along the UPRR tracks indicate that vibration levels are 70 VdB or less at a distance of 100 feet from the center of the nearest railroad track. Residential units proposed within 50 feet of the nearest UPRR tracks may be subject to vibration levels above 75 VdB which would result in a significant impact under the FTA vibration impact criteria.

As noted under railroad noise, potential effects of the pending Central Valley High-Speed Train (HST) Program are discussed in *Section 5.0 Cumulative Impacts*.

Impact NV-3: Residential uses allowed under the Specific Plan within approximately 50 feet of the UPRR would be subject to vibration from railroad trains that would exceed the FTA impact guidelines. **(Significant Impact)**

3.3.2.4 *Noise Impacts from Development in the Project Area*

Under the proposed Specific Plan, additional residences, retail uses, and office uses could be developed in the Downtown and adjacent areas. These land uses generally are not substantial generators of environmental noise from mechanical systems or outside operations (such as the routine operation of heavy equipment or amplified sound). The intensification of these types of land uses within the Downtown area would not be a substantial source of new noise (refer to *Section 3.1 Land Use* for a discussion of land use compatibility) in the community. In addition, measures included in the Morgan Hill Municipal Code, limit operational noise from outdoor seating areas and other sources at property lines during nighttime hours. As discussed below, increased traffic generation would be a source of project-generated noise.

Traffic Noise Resulting from Development in the Project Area

Based on the intersection turning movement data contained in the Downtown Specific Plan traffic study, additional traffic resulting directly from the Project and Project Alternate would not significantly increase noise levels in and around the Specific Plan project area. Traffic noise levels along the major routes are anticipated to increase by one to two dBA L_{dn} overall as a result of projected development by 2030, including projected Downtown Specific Plan development based on the traffic impact analysis assumptions. The contribution of projected Downtown Specific Plan development to these overall noise increases would be less than one decibel. The Project Alternate would not result in significantly different traffic noise level increases than the Project. Both the Project and Project Alternate would not increase traffic-generated noise levels by greater than three decibels and, therefore, would not result in a significant impact.

Impact NV-4: Noise level increases in the project area from traffic generated by development allowed under the Specific Plan Project and Project Alternate would not substantially increase ambient noise levels or generate noise in excess of standards established in the local general plan and Municipal Code. **(Less Than Significant Impact)**

Construction Noise

Construction activities can generate high noise levels, especially during the construction of project infrastructure when heavy equipment is used. The highest maximum instantaneous noise levels generated by project construction would typically range from approximately 90 to 95 dBA L_{max} at a distance of 50 feet from the noise source. Typical hourly average construction generated noise levels are approximately 81 dBA to 88 dBA measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Portable rock crushers may be used to recycle demolition materials. These portable crushers typically generate noise levels of up to 85 dBA L_{eq} at a distance of 50 feet. Construction generated noise levels drop off at a rate of approximately six dBA per doubling of distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (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. Where noise from construction activities exceeds 60 dBA L_{eq} and exceeds the ambient noise environment by at least five dBA L_{eq} at noise-sensitive uses in the project vicinity for a period of one year or more, the impact would be considered significant.

Typically, significant noise impacts do not result when standard construction noise control measures are enforced at the project site and when the duration of the noise generating construction period is limited to one construction season (typically one year) or less. Noise generated by demolition, grading, infrastructure improvements and the construction of building shells would not be expected to occur for periods greater than one year for most small infill projects proposed within the Specific Plan project area. However, larger mixed-use projects proposed under the Specific Plan and construction durations for these projects could exceed one construction season (one year). A particular sensitive receptors or group of receptors could be subject to construction noise levels in excess of 60 dBA L_{eq} and the ambient noise environment by 5 dBA L_{eq} for durations exceeding one construction season.

Standard Measures: The following standard measure will reduce potential construction related noise impacts to nearby sensitive receptors:

SM NV-2: Construction activities shall be limited to the hours between 7:00 a.m. and 8:00 p.m., Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities should occur on Sundays or federal holidays (Consistent with Section 8.28.040 of the Morgan Hill Municipal Code).

Impact NV-5: Construction activities, even with incorporation of standard measures, could impact noise sensitive receptors in the project area for more than one year. **(Significant Impact)**

3.3.3 Mitigation Measures

3.3.3.1 *Noise Impacts to Development in the Project Area*

The following measures shall be implemented as part of the site development permit process for development allowed under the Specific Plan to reduce impacts to residents from exterior ambient noise to a less than significant level:

MM NV-1.1: Residential development shall be setback from traffic and railroad noise sources to reduce ambient noise levels in outdoor use areas to the extent feasible. Noise-sensitive outdoor spaces shall be shielded with buildings or noise barriers wherever possible. Residential development proposed under the Specific Plan shall strive to reduce traffic noise levels to 60 dBA L_{dn} or less and railroad train noise levels to 70 dBA L_{dn} or less in outdoor use areas through a combination of setbacks, noise barriers, and building design/layout. The specific determination of what treatments are necessary would be conducted on a project-by-project basis. Implementation of these measures would reduce noise impacts to outdoor use areas to a less than significant level for many of the proposed downtown residential units, however, even with incorporation of these mitigation measures to the extent feasible, the outdoor spaces for some residential units will continue to be impacted and, therefore, this impact is significant and unavoidable.

MM NV-2.1: Project-specific acoustical analyses shall be submitted for all residential and mixed-use projects where exterior noise levels exceed 60 dBA L_{dn}. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required for new residential uses adjacent to the UPRR, Monterey Road, or Butterfield Boulevard. Special building construction techniques (e.g., sound-rated windows and building facade treatments) would be required to reduce maximum instantaneous noise levels (L_{max}) to 50 dBA in bedrooms and 55 dBA in other habitable rooms. These treatments include, but are not limited to, sound rated windows and doors, sound rated wall construction, acoustical caulking, insulation, acoustical vents, etc. Large windows and doors should be oriented away from the railroad where possible, and sensitive interior spaces should be located further from the railroad corridor. Projects shall also incorporate setbacks, as great as feasible, from the railroad corridor and construct noise barriers. The specific determination of what treatments are necessary would be conducted on a unit-by-unit basis. Results of the analysis, including the description of the necessary noise control treatments, would be submitted to the City along with the building plans and approved prior to issuance of a building permit.

The City should also explore designation of the at-grade rail crossings as "quiet zones". Quiet zones could be established so that trains would not be required to sound their warning whistles but would require greater safety controls at the crossings. Wayside horn systems could be installed at the at-

grade crossings to confine horn noise only in the immediate vicinity of the crossings.

For some downtown residential properties incorporation of project-specific noise reduction treatments will reduce the L_{max} noise impact to a less than significant level; however, for many units on properties adjoining the railroad the interior L_{max} noise standards may not be met even with incorporation of feasible and best available methods and, therefore, this impact would be significant and unavoidable.

3.3.3.2 *Groundborne Vibration*

The following measures shall be implemented as part of the site development permit process for development allowed under the Specific Plan to reduce impacts to residents from groundborne vibration to a less than significant level:

MM NV-3.1: Residential structures shall be located at least 50 feet from the nearest railroad track unless project specific vibration analyses indicate that vibration levels at the building site and/or the design of the project result in vibration levels of 75 VdB or less.

3.3.3.3 *Construction Noise*

MM NV-5.1: The following mitigation measures shall be implemented, as conditions of approval, in addition to construction hour limitations in the Morgan Hill Municipal Code, to reduce potential construction related noise impacts to nearby sensitive receptors:

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise generating equipment (e.g. rock crushers, compressors) as far as possible from adjacent residential receivers.
- Acoustically shield stationary equipment located near residential receivers with temporary noise barriers or recycled demolition materials.
- Utilize "quiet" air compressors and other stationery noise sources where technology exists.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., bad muffler, etc.) and would require that reasonable measures be implemented to correct the problem.

3.3.4 Conclusion

Impact NV-1:	Residential development proposed under the Downtown Specific Plan would be exposed to exterior noise levels exceeding 60 dBA L_{dn} from traffic noise and 70 dBA L_{dn} from railroad noise. Exterior noise levels exceeding the acceptable General Plan standards would result in significant impacts to outdoor spaces in new residential development in the Downtown.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM NV-1.1
Impact After Mitigation	Significant Unavoidable Impact

Impact NV-2:	Interior noise levels would be reduced through the incorporation of standard measures, however, L_{max} noise levels of up to 110 dBA from train warning whistles, would exceed the City's L_{max} noise standards.
Standard Measures	SM NV-1
Impact After Standard Measures	Significant
Mitigation Measures	MM NV-2.1 and MM NV-2.2
Impact After Mitigation	Significant Unavoidable Impact

Impact NV-3:	Residential uses allowed under the Specific Plan within approximately 50 feet of the UPRR would be subject to vibration from railroad trains that would exceed the FTA impact guidelines.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM NV-3.1
Impact After Mitigation	Less Than Significant

Impact NV-4:	Noise level increases in the project area from traffic generated by development allowed under the Specific Plan Project and Project Alternate would not substantially increase ambient noise levels or generate noise in excess of standards established in the local general plan and Municipal Code.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact NV-5:	Construction activities, even with incorporation of standard measures, could impact noise sensitive receptors in the project area for more than one year.
Standard Measures	SM NV-2
Impact After Standard Measures	Significant Impact
Mitigation Measures	MM NV-5.1
Impact After Mitigation	Significant Unavoidable Impact

3.4 AIR QUALITY

The following discussion is based on an Air Quality Impact Analysis prepared by *Don Ballanti, Certified Consulting Meteorologist* in July 2008. A copy of this report is included as Appendix E in this EIR.

3.4.1 Existing Setting

3.4.1.1 *Overview*

Air pollution typically refers to air that contains chemicals in concentrations that are high enough to cause adverse effects to humans, other animals, vegetation, or materials. Air pollutants include those from natural sources (e.g., forest fires, volcanic eruptions, windstorms, etc.) and human sources (e.g., factories, transportation, power plants, etc.). In the Santa Clara Valley, vehicular emissions are the predominant source of air pollutants.

In recognition of the adverse effects of degraded air quality, Congress and the California Legislature enacted the Federal and California Clean Air Acts, respectively. As a result of these laws, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for what are commonly referred to as "criteria pollutants", because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and particulate matter. In general, the California standards are more stringent than the federal standards. Table 3.4-1 lists these pollutants, their sources and effects, and the related standards.

The Bay Area Air Quality Management District (BAAQMD) oversees air quality in the San Francisco Bay Area. BAAQMD prepares various plans (e.g., *Bay Area 2005 Ozone Strategy*) that set forth the strategies and policies for the region to achieve and maintain compliance with the standards listed in Table 3.4-1. Its roles include the issuance of permits for stationary sources that emit pollutants, the development and oversight of pollutant reduction strategies, the monitoring of air quality, and the enforcement of air quality regulations.

BAAQMD also operates its Toxic Air Contaminant Control Program, which implements and enforces all Maximum Achievable Control Technology (MACT) standards and Airborne Toxic Control Measures (ATCMs) pertaining to the emission of such substances from stationary sources. This program also monitors the concentrations of toxic air contaminants at various locations in the Bay Area.

Despite the substantial growth of the Bay Area in recent decades, overall air quality has been improving. The improvement is primarily due to the implementation of measures that have reduced emissions from both stationary sources (e.g., factories, power plants, refineries, etc.) and mobile sources (e.g., automobiles, buses, trucks, aircraft, etc.). Complementing source-control measures are a variety of strategies, policies, and programs that are designed to improve air quality. These include programs to buy-back older automobiles and gasoline-powered lawnmowers, incentives for replacing older wood-burning stoves and fireplaces, incentives/subsidies for transit riders/carpoolers, incentives for purchasing low-emission products, Spare-the-Air campaigns, and local land use policies that result in a reduction in the number/length of vehicle trips. The latter category includes locating jobs near housing, constructing mixed-use developments, and zoning land along rail corridors for higher densities.

Table 3.4-1
Major Criteria Air Pollutants and Standards

	Pollutant					
	Ozone	**Carbon Monoxide**	**Nitrogen Dioxide**	**Sulfur Dioxide**	**PM_{10}**	**$PM_{2.5}$**
Health Effects	Eye irritation, respiratory function impairment	Aggravation of cardio-vascular disease, fatigue, headache, confusion, dizziness, can be fatal	Increased risk of acute and chronic respiratory disease	Aggravation of lung disease, increased risk of acute and chronic respiratory disease	Aggravation of chronic disease and heart/lung disease symptoms	Aggravation of chronic disease and heart/lung disease symptoms
Major Sources	Combustion sources, evaporation of solvents and fuels	Combustion of fuel, combustion of wood in stoves and fireplaces	Motor vehicle exhaust, industrial processes, fossil-fueled power plants	Diesel exhaust, oil power plants, industrial processes	Combustion, cars, field burning, factories, unpaved roads, construction	Combustion, cars, field burning, factories, unpaved roads, construction
Federal Standard	1-hr: n/a 8-hr: .075ppm	1-hr: 35ppm 8-hr: 9ppm	1-hr: n/a AA: .05ppm	1-hr: n/a 24-hr:.14ppm AA: .03ppm	24-hr: 150 µg/m^3 AA: n/a	24-hr: 35 µg/m^3 AA: 15 µg/m^3
State Standard	1-hr: .09ppm 8-hr: .07ppm	1-hr: 20ppm 8-hr: 9ppm	1-hr: .18ppm AA: .03ppm	1-hr: .25ppm 24-hr:.04ppm AA: n/a	24-hr: 50 µg/m^3 AA: 20 µg/m^3	24-hr: n/a AA: 12 µg/m^3
Bay Area Attainment Status	federal – N state (8-hr) – N state (1-hr) – N	A	A	A	federal – U state – N	federal (24-hr) – U federal (AA) -A state – N

Attainment Status: A = attainment N = nonattainment, U = Unclassified
PM10 = particulate matter, 10 microns in size PM2.5 = particulate matter, 2.5 microns in size
ppm = parts per million µG/m3 = micrograms per cubic meter
AA = annual average 1-hr = 1-hour average 8-hr = 8-hour average
24-hr = 24-hour average n/a = not applicable
Source: California Air Resources Board, Ambient Air Quality Standards, April 2008.

As shown in Table 3.4-1, the Bay Area is designated as an "attainment area", meaning the area meets the relevant standards, for carbon monoxide, nitrogen dioxide, and sulfur dioxide. The region is classified as a "nonattainment area" for the federal eight-hour and state ozone standards and the state one-hour ozone standard. The area does not meet the state standards for particulate matter but is in attainment of the federal $PM_{2.5}$ annual average standard.

3.4.1.2 *Ambient Air Quality*

As noted above, BAAQMD monitors air quality at various locations throughout the Bay Area. The closest multi-pollutant monitoring station to the project site is located in downtown San José. BAAQMD also operates two monitoring sites measuring only ozone in southern Santa Clara Valley in San Martin and in Gilroy.

The Monterey Bay Unified Air Pollution Control District monitors air quality within the North Central Coast Air Basin (NCCAB). The nearest NCCAB monitoring site to the project is located in Hollister, located in San Benito Valley.

Table 3.4-2 summarizes recent data for these four stations in terms of the number of days the applicable standard was exceeded.

Table 3.4-2
Summary of Recent Air Quality Monitoring Data
for the Santa Clara and San Benito Valleys
[Expressed as Number of Days Exceeding the Standard]

Pollutant	Standard	San José			San Martin			Gilroy			Hollister		
		2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
Ozone	State 1-hour	1	5	0	2	7	1	0	4	0	0	1	0
Ozone	State 8-hour	1	6	0	3	11	4	0	8	0	1	5	2
Ozone	Federal 8-hour	0	1	0	0	5	0	0	2	0	0	1	0
CO	State/Federal 8-hour	0	0	0	-	-	-	-	-	-	-	-	-
NO_2	State 1-hour	0	0	0	-	-	-	-	-	-	-	-	-
PM_{10}	Federal 24-hour	0	0	0	-	-	-	-	-	-	0	0	0
PM_{10}	State 24-hour	2	2	3	-	-	-	-	-	-	0	0	0
$PM_{2.5}$	Federal 24-hour	0	0	0	-	-	-	-	-	-	-	-	0

Source: Air Resources Board, Aerometric Data Analysis and Management (ADAM), 2008.

3.4.1.3 *Toxic Air Contaminants*

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde.

Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Health effects of TACs include cancer, birth defects, neurological damage and death.

3.4.1.4 *Sensitive Receptors*

The Bay Area Air Quality Management District defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics. Sensitive receptors within the project area are primarily residences but also include the Lewis H. Britton Middle School located on and adjacent to Block 19.

3.4.2 Air Quality Impacts

3.4.2.1 *General Plan Amendment Thresholds of Significance*

The BAAQMD has developed thresholds of significance for local plans (general plans, redevelopment plans, specific area plans). A General Plan or General Plan amendment would result in a significant impact if it is determined to be inconsistent with the most recently adopted Clean Air Plan (CAP). According to the BAAQMD, the following criteria must be satisfied for a local plan to be determined to be consistent with the CAP and not have a significant air quality impact:

- The local plan should be consistent with the CAP population and Vehicle Miles Traveled (VMT) assumptions. This is demonstrated if the population growth over the planning period will not exceed the values included in the current CAP, and the rate of increase in VMT for the jurisdiction is equal to or less than the rate of increase in population.
- The local plan demonstrates reasonable efforts to implement the Transportation Control Measures (TCMs) included in the CAP that identify cities as implementing agencies.
- For local plans to have less than significant impacts with respect to potential odors/or toxic air contaminants, buffer zones should be established around existing and proposed land uses that would emit these air pollutants.

3.4.2.2 *Project-Level Thresholds of Significance*

In addition to the above thresholds, for the purposes of this EIR, an air quality impact is considered significant if the project would:

- Violate an ambient air quality standard or contribute substantially to an existing or project air quality violation; or
- Result in substantial emissions or deterioration of ambient air quality; or
- Create objectionable odors; or
- Expose sensitive receptors or expose the general public to substantial levels of toxic air contaminants.

A project contributing to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of nine (9) parts per million (ppm) averaged over eight hours or 20 ppm for one hour would have a significant impact air quality impact.

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 (NO_x) or PM_{10}. Despite the establishment of both federal and state standards for $PM_{2.5}$ (particulate matter, 2.5 microns), the BAAQMD has not developed a threshold of significance for this pollutant. For this analysis, $PM_{2.5}$ impacts would be considered significant if project emissions of PM_{10} exceed 80 pounds per day.

The BAAQMD significance threshold for construction dust impacts is based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emissions of PM_{10}. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less-than-significant.

3.4.2.3 *Consistency with Clean Air Planning*

The Final EIR prepared for the Morgan Hill General Plan in 2001 found that General Plan growth would result in Vehicles Miles Traveled (VMT) growing faster than population. With mitigation, the General Plan was found to demonstrate reasonable efforts to implement the TCM's in the regional Clean Air Plan. Even with mitigation, the Morgan Hill General Plan was found to result in VMT increasing faster than population. This was identified as a significant and unavoidable impact.

The project, adoption and implementation of the proposed Downtown Specific Plan, would have a beneficial impact on reducing the rate of increase in regional Vehicles Miles Traveled. The project would not increase population projections, but would result in shorter and fewer vehicle trips. The rate of residential growth is controlled by the City's Residential Development Control System that limits new residences in the City to approximately 250 units per year. Given that the RDCS and General Plan retain the 48,000 population cap, the increased emphasis on downtown infill development resulting from the Specific Plan, either through the passage of the ballot measure or continued RDCS downtown set-asides by the City Council, supports the goals of the Clean Air Plan.

The project would be consistent with the Transportation Control Measures that comprise the regional air quality plan. Specifically, Regional Transportation Control Measure 15 (Local Land Use Planning and Development Strategies) commits the BAAQMD, MTC and ABAG to the promotion of Smart Growth patterns of development. Smart growth planning seeks to create and preserve thriving communities based upon compact and efficient use of land, a mix of compatible land uses, a range of housing opportunities and choices, and a variety of viable transportation options. The proposed project utilizes a number of Smart Growth strategies. The project is an infill development, providing high density residential development, mixed uses, and a range of housing opportunities with access to transit. The proposed project, therefore, is consistent with the regional Clean Air Plan and would not have a significant impact on air quality due to the proposed General Plan amendments.

Impact AQ-1: The proposed General Plan amendments, due to their infill location, mix of proposed uses, and adherence to the RDCS population cap are consistent with the Clean Air Plan. **(Less Than Significant Impact)**

3.4.2.4 *Regional and Local Air Quality Impacts*

Regional Air Quality Impacts

Vehicle trips generated by the project would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. Regional emissions associated with anticipated net new development, based on the traffic impact analysis assumptions, through the year 2015 and 2030 were calculated using the URBEMIS2007 emission model. The methodology used in estimating emissions is described in Appendix E.

The incremental daily emission increase associated with project land uses is identified in Table 3.4-3 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM_{10}. The Bay Area Air Quality Management District has established thresholds of significance for ozone precursors and PM_{10} of 80 pounds per day. Proposed project emissions shown in Table 3.4-3 would exceed the threshold of significance for ROG and PM_{10} and, therefore, the proposed project would have a significant impact on regional air quality due to increases in ozone and particulate matter (PM_{10} and $PM_{2.5}$).

Table 3.4-3
Project Regional Emissions (Year 2015 and Year 2030)

	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_x)	PM_{10}	$PM_{2.5}$
2015 Analysis				
Area Sources	47.7	6.6	0.4	0.4
Vehicles	35.7	31.9	81.6	15.5
2015 Total	83.4	38.5	82.0	15.9
2030 Analysis				
Area Sources	69.6	11.4	0.4	0.4
Vehicles	38.7	25.0	168.5	31.8
2030 Total	110.1	37.5	174.6	33.0
BAAQMD Significance Threshold	80.0	80.0	80.0	N/A

Sources: Don Ballanti, Certified Consulting Meteorologist. Air Quality Impact Analysis for the Proposed Morgan Downtown Specific Plan. July 2008.
David J. Powers & Associates, Inc. *URBEMIS 2007 Project Combined Summer Emissions Report 2030*. July 20, 2009.

Impact AQ-2: Projected new development through 2015 and 2030 under the proposed project would result in an increase in regional air pollutant emissions of ROG and PM_{10} in excess of BAAQMD thresholds and, therefore, would result in significant impacts to regional air quality. **(Significant Impact)**

Local Air Quality Impacts

On the local scale, the development allowed under the Specific Plan would change traffic on the local street network, changing carbon monoxide levels along roadways used by project traffic. Carbon monoxide is an odorless, colorless poisonous gas whose primary source in the Bay Area is automobiles. Concentrations of this gas are highest near intersections of major roads.

Carbon monoxide concentrations under worst-case meteorological conditions were modeled for the signalized intersections, shown in Table 3.4-4, affected by the project. These intersections were selected as having the worst intersection LOS and highest potential for elevated concentrations of carbon monoxide.

Peak hour traffic volumes were applied to a screening form of the CALINE 4 dispersion model to predict maximum one- and eight-hour concentrations near these intersections. Appendix E provides a description of the model and a discussion of the methodology and assumptions used in the analysis. The model results were used to predict the maximum one- and eight-hour concentrations, corresponding to the one- and eight-hour averaging times specified in the state and federal ambient air quality standards for carbon monoxide.

Table 3.4-4 shows the results of the CALINE-4 analysis for the peak one-hour and eight-hour traffic periods in parts per million (PPM). The one-hour values are to be compared to the federal 1-hour standard of 35 PPM and the state standard of 20 PPM. The eight-hour values in Table 3.4-4 are to be compared to the state and federal standard of nine PPM.

Table 3.4-4 shows that existing predicted concentrations near the intersections meet the one-hour and eight-hour standards. Levels in 2015 under the current general plan would be below current levels

due to anticipated reductions in per-mile emission rates from vehicles. Additional traffic from the project would increase concentrations by no more that 0.1 Parts Per Million (PPM) in 2015.

Levels in 2030 under the current general plan would be below current levels due to anticipated reductions in per-mile emission rates from vehicles. Additional traffic from the project would increase concentrations by less than 0.1 Parts Per Million (PPM) in 2030.

Since projected 2015 and 2030 levels of project traffic would not cause any new violations of the eight-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations would be less than significant.

Table 3.4-4
Carbon Monoxide Concentrations Near Worst-Case Intersection (PPM)

Intersection	Existing (2008)		2015 GP Baseline		2015 Project		2030 GP Baseline		2030 Project	
	1-hr.	8-hr.	1-hr.	8-hr.	1-hr.	8-hr.	1-hr.	8-hr.	1-hr.	8-hr.
Monterey Road/ Cochrane Road	6.6	4.1	5.7	3.5	5.7	3.5	5.1	3.1	5.1	3.1
Butterfield Blvd./ Cochrane Road	6.2	3.9	5.2	3.2	5.2	3.2	4.8	2.9	4.8	2.9
Monterey Road/ Main Avenue	5.9	3.6	5.1	3.1	5.2	3.2	4.6	2.8	4.6	2.8
Monterey Road/ Dunne Avenue	6.9	4.4	5.5	3.4	5.6	3.4	4.7	2.8	4.7	2.8
Butterfield Blvd./ Main Avenue	6.2	3.8	5.3	3.2	5.3	3.3	4.6	2.8	4.6	2.8
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0	20.0	9.0	20.0	9.0

Notes: GP = Morgan Hill General Plan

Impact AQ-3: Project traffic would add to carbon monoxide concentrations near streets and intersections providing access to the site; however, traffic under Project and Project Alternate roadway conditions would not cause any new violations of the eight-hour standards for carbon monoxide and, therefore, would not significantly increase carbon monoxide concentrations. **(Less Than Significant Impact)**

3.4.2.5 *Toxic Air Contaminants and Odors*

The California Air Resources Board recently published an air quality/land use handbook. The handbook, which is advisory and not regulatory, was developed in response to recent studies that have demonstrated a link between exposure to poor air quality and respiratory illnesses, both cancer and non-cancer related. The CARB handbook recommends that planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools and playgrounds. Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners and large gasoline service stations.

The Specific Plan project area undoubtedly contains minor stationary sources of toxic air contaminant (TAC) emissions. Common sources are gasoline stations, emergency diesel generators, dry cleaners and some industrial processes. All these sources are regulated by the Bay Area Air

Quality Management District. Such sources are subject to the rules and regulations of the District, which currently require that all sources of TACs be evaluated for health risks prior to issuance of a permit.

The Specific Plan does not place sensitive receptors near major stationary or mobile sources of TACs. There are no major odor sources within or near the Specific Plan project area. The impacts of the Specific Plan related to health risks from TACs and exposure to odors, therefore, would be less than significant.

Impact AQ-4: Development under the proposed Specific Plan would not be subject to any major sources of stationary or mobile sources of TACs or odor sources. **(Less Than Significant Impact)**

3.4.2.6 *Short-Term Construction Impacts*

Construction Dust Emissions

Construction activities associated with project facilitated public and private development and infrastructure improvements may include building demolition, grading, installation of utilities, new building construction, and paving. Generally, the most substantial air pollutant emissions would be dust generated from building demolition or site grading. The physical demolition of existing structures and other infrastructure can generate substantial dust. In addition to the dust created during demolition, substantial dust emissions could be created as debris is crushed for reuse on development sites or loaded into trucks for disposal. Without adequate dust control measures, visible dust clouds extending beyond the construction or demolition site could occur.

According to the BAAQMD CEQA Guidelines, emissions of ozone precursors (ROG and NO_x) and carbon monoxide related to 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 effects of construction activities would be increased dustfall and locally elevated levels of PM_{10} downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties.

Standard Measures: The following standard dust control measure would reduce potential construction-related air quality impacts:

SM AQ-1: In accordance with the City of Morgan Hill Standard Conditions of approval, a management plan detailing strategies for control of dust during construction of the project shall be included on all site development and grading plans. The intent of this condition is to minimize construction related disturbance of residents of the nearby or adjacent properties. [MHMC 18.48.005]

Impact AQ-5: Demolition and construction activities due to redevelopment in the Specific Plan project area, even with incorporation of City of Morgan Hill standard measures, may generate construction-period exhaust and fugitive dust that would temporarily affect local air quality. **(Significant Impact)**

Construction Toxic Air Contaminant Emissions

Construction of proposed development in the Specific Plan project area would require the use of various diesel-powered vehicles and equipment. In 1998 the California Air Resources Board identified particulate matter from diesel fueled engines as a toxic air contaminant (TAC). CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines. High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) were identified as having the highest associated risk.

Health risks from Toxic Air Contaminants are a function of both concentration and duration of exposure and are analyzed for a 70-year exposure. Unlike the above types of sources, 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. Statewide emissions standards for heavy-duty construction equipment will be causing diesel particulate emission rates to drop over the buildout period of the project. Due to the short duration of construction activities in any one location, health risks from construction emissions of diesel particulate would result in less than significant impacts to nearby sensitive receptors.

Impact AQ-6: Due to the short duration of toxic air contaminant emissions from construction, health risks from construction emissions of diesel particulates would not result in significant air quality impacts. **(Less Than Significant Impact)**

3.4.3 Mitigation Measures

3.4.3.1 *Regional Emissions*

MM AQ-2.1: The Specific Plan shall be amended to require submission of an Air Quality and Transportation Demand Management (AQ-TDM) Plan as part of the Design Permit (Architectural and Site Review) application for review and approval by the Community Development Director. The AQ-TDM Plan will incorporate appropriate measures at appropriate locations as determined through the design permit process, such as the following, to reduce air quality impacts:

- Provide bicycle lanes, sidewalks and/or paths, connecting project residences to adjacent schools, parks, the nearest transit stop and nearby commercial areas.
- Provide secure and conveniently placed bicycle parking and storage facilities at parks and other facilities.
- Allow only natural gas fireplaces. No wood burning devices would be allowed.
- Construct transit amenities such as bus turnouts/bus bulbs, benches, shelters, etc.
- Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.
- Provide showers and lockers for employees bicycling or walking to work.
- Provide transit information kiosks and bicycle parking at commercial facilities.

- Provide secure and conveniently located bicycle parking and storage for workers and patrons.

MM AQ-2.2: Public parking lots constructed or assisted by the City or Redevelopment Agency of Morgan Hill and private residential parking facilities of 50 spaces or more shall include the following amenities:

- Electric vehicle charging facilities.
- Preferential parking for Low Emission Vehicles (LEVs).

The above measures have the potential to reduce project-related regional emissions by five to ten percent. A reduction of this magnitude would not reduce emissions to below the BAAQMD significance threshold of 80 pounds per day for ROG and PM_{10}. Project regional air quality impacts, therefore, would remain significant and unavoidable.

3.4.3.2 *Construction Dust Emissions*

MM AQ-5.1: The Bay Area Air Quality Management District (BAAQMD) has prepared a list of feasible demolition and construction dust control measures required to reduce construction impacts to a less than significant level. The following construction practices shall be incorporated into dust mitigation plans implemented during demolition and construction phases of proposed development in the Specific Plan project area to reduce dust and exhaust emissions:

- Water active demolition areas to control dust generation during demolition of structures and break up of pavement.
- Cover all trucks hauling demolition debris from the site.
- Use dust proof chutes to load debris into trucks whenever feasible.
- Water all active construction areas at least twice daily.
- Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard.
- 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.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

AM AQ-5.1: The following additional measures recommended by the BAAQMD to reduce engine exhaust emissions:

- Use alternative fueled construction equipment, when feasible.
- Minimize idling time (five minutes maximum).
- Maintain properly tuned equipment.
- Limit the hours of operation of heavy equipment and/or the amount of equipment in use.

3.4.4 Conclusion

Impact AQ-1:	The proposed General Plan amendments, due to their infill location, mix of proposed uses, and adherence to the RDCS population cap are consistent with the Clean Air Plan.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact AQ-2:	Projected new development through 2015 and 2030 under the proposed project would result in an increase in regional air pollutant emissions of ROG and PM_{10} in excess of BAAQMD thresholds and, therefore, would result in significant impacts to regional air quality.
Standard Measures	None
Impact After Standard Measures	Significant
Mitigation Measures	MM AQ-2.1 and MM AQ-2.2
Impact After Mitigation	Significant Unavoidable Impact

Impact AQ-3:	Project traffic would add to carbon monoxide concentrations near streets and intersections providing access to the site; however, traffic under Project and Project Alternate roadway conditions would not cause any new violations of the eight-hour standards for carbon monoxide and, therefore, would not significantly increase carbon monoxide concentrations.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact AQ-4:	Development under the proposed Specific Plan would not be subject to any major sources of stationary or mobile sources of TACs or odor sources.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact AQ-5:	Demolition and construction activities due to redevelopment in the Specific Plan project area, even with incorporation of City of Morgan Hill standard measures, may generate construction-period exhaust and fugitive dust that would temporarily affect local air quality.
Standard Measures	SM AQ-1
Impact After Standard Measures	Significant
Mitigation Measures	MM AQ-5.1 and AM AQ-5.1
Impact After Mitigation	Less Than Significant

Impact AQ-6:	Due to the short duration of toxic air contaminant emissions from construction, health risks from construction emissions of diesel particulates would not result in significant air quality impacts.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.5 GEOLOGY, SOILS, AND SEISMICITY

3.5.1 Existing Setting

3.5.1.1 *Topography*

Downtown Morgan Hill is located on the floor of the Santa Clara Valley with elevations in the Specific Plan project area ranging from approximately 340 to 350 feet above mean sea level. The Santa Clara Valley is situated between the Santa Cruz Mountains to the west and the Diablo Mountain Range to the east. Geologically speaking, the region developed recently, during the Cenozoic era, when these two mountain ranges grew as a result of both the folding and thrusting of the earth's crust, and active volcanoes. Thus, the Santa Clara Valley is a structural valley, created by the development of mountain ranges, rather than the result of erosion. In the vicinity of Downtown Morgan Hill, the natural land surface in the valley area slopes slightly to the south.

3.5.1.2 *Geology and Soils*

The City of Morgan Hill is in an area that consists of three distinct "terrain units," the Valley Floor, the Santa Cruz Mountains foothills, and the Diablo Range foothills. The nearly flat Valley Floor encompasses the largest portion of the Specific Plan project area, with the lower slopes of Nob Hill located at the western edge of the Downtown.

The geologic landscape in Morgan Hill consists of bedrock and surface soils. Most of the underlying bedrock belongs to either the Franciscan Assemblage or the Santa Clara Formation, although smaller deposits of other rock units are found throughout the study area.

Surface soils in the area are derived from old alluvium (Qoa), active alluvium (Qa), colluvium[14], and greenstone rock (KJfg).[15] Old alluvium is located throughout most of the project area with active alluvium located along West Little Llagas Creek, and colluvium and greenstone located on Nob Hill in the southwest of the Specific Plan project area.

The soils in the project area have moderate to high expansion potential.[16] Expansive soils shrink and swell as a result of moisture changes. These changes can cause heaving and cracking of slabs-on-grade, pavements and structures found on shallow foundations. Portions of Blocks 11 through 14 are located in a landslide hazard zone (refer to Figure 19).[17]

[14] Colluvium is a loose deposit of rock debris accumulated through the action of gravity at the base of a cliff or slope.
[15] Pacific Geotechnical Engineering for the City of Morgan Hill. Geologic Map. December 1991.
[16] Ibid.
[17] County of Santa Clara. Santa Clara County Geologic Hazard Zones. October 18, 2006.

Source: City of Morgan Hill

SANTA CLARA COUNTY LANDSLIDE HAZARD ZONE FIGURE 19

3.5.1.3 *Seismicity*

Morgan Hill is within Santa Clara County, which is part of the seismically active San Francisco Bay Area. It is classified as Zone 4, the most seismically active zone in the United States. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions. According to the City of Morgan Hill Geotechnical Hazards maps and the County of Santa Clara Geologic Hazard Zones maps, the project site is not located in a fault rupture hazard zone.[18]

The closest major fault lines to the project site include the San Andreas Fault located approximately 10 miles southwest of the Specific Plan area and the Calaveras Fault located approximately five miles east of the Specific Plan area.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loosely water-saturated soils from a solid state to a liquid-like state after ground shaking. There are many variables that contribute to liquefaction including the age of the soil, soil type, soil cohesion, soil density, and ground water level. Groundwater has been measured within 15 feet of the surface in much of the downtown area.[19] According to the Santa Clara County Geologic Hazard Zones maps, the Specific Plan project area is not located within a liquefaction hazard zone.[20]

Lateral Spreading

Lateral spreading occurs as a form of horizontal displacement of alluvial material toward an open free face, such as a creek channel. Parcels within the Specific Plan area located adjacent to West Little Llagas Creek have a potential for horizontal or vertical movement during a seismic event.

3.5.1.4 *Applicable Morgan Hill Policies and Standards*

Various City policies and standards included in the General Plan, Municipal Code (MHMC), Zoning Ordinance, and Building Code have been adopted for the purpose of avoiding or mitigating geology, soils, and seismicity impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the following development policies and standards:

- *Incompatible Uses Policy 6a* – Avoid Development Natural Hazard Areas
- *Environmental Hazards Policy 1a* – Limit Uses on Lands With Geologic Hazards
- *Environmental Hazards Policy 1b* – In Developed Areas Mitigate for Geologic Hazards
- *Environmental Hazards Policy 1g* – New Development Should Avoid Hazardous and Sensitive Areas
- *MHMC Chapter 18.43 Seismic Combining District*
- *MHMC Chapter 18.44 Hillside Combining District*
- *MHMC Chapter 18.45 Geologic Combining District*

[18] County of Santa Clara. Santa Clara County Geologic Hazard Zones. February 26, 2002.
[19] Pacific Geotechnical Engineering for the City of Morgan Hill. Geologic Map. December 1991.
[20] County of Santa Clara. Santa Clara County Geologic Hazard Zones. October 18, 2006.

3.5.2 Geology, Soils, and Seismicity Impacts

3.5.2.1 *Thresholds of Significance*

For the purposes of this EIR, a geology, soils, or seismicity impact is considered significant if the project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
  - Strong seismic ground shaking,
  - Seismic-related ground failure, including liquefaction, and/or
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil; or
- 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
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

3.5.2.2 *Soil Conditions*

Soils in the project area have a moderate to high expansion potential. Expansive soil conditions could damage future development and improvements proposed under the Specific Plan, which would represent a significant impact unless substantial damage is avoided by incorporating appropriate engineering into the grading and foundation design of proposed buildings.

Several blocks of the Specific Plan project area, located at the eastern base of Nob Hill, are also subject to landslide hazards. Development and redevelopment of parcels on Blocks 11 through 14 of the Specific Plan area could be substantially damaged unless appropriate engineering considerations are included in proposed buildings.

Generally, the flat to gently sloping areas of Downtown Morgan Hill would not be subject to substantial soil erosion or the loss of topsoil during redevelopment activities. Where slopes are steeper, primarily in the area designated for *Residential Estate* land use, the potential for accelerated soil erosion is greater. The proposed project does not propose changes to allowed residential density in this area.

Standard Measures: In accordance with the City of Morgan Hill standards, development in the Specific Plan project area shall implement the following measures to reduce and/or avoid soil hazards and substantial erosion impacts:

SM GEO-1: Prior to issuance of site development permits, the applicant shall provide two copies of a soils (geotechnical) engineering report prepared by a registered civil (geotechnical) engineer to the City of Morgan Hill Building Division for review and approval. The report shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading criteria for corrective measures, and opinion on adequacy for the intended use of sites to be developed by

the proposed grading as affected by soils engineering factors, including the stability of slopes, per Uniform Building Code (UBC) Appendix Chapter 70. The report shall also include soil classification and foundation investigation as required by UBC Chapter 29 (UBC Appendix Chapter 33).

SM GEO-2: The project shall implement standard grading and best management practices, including but not limited to, street sweeping, fiber rolls, inlet protection, stockpile covering or watering, covering of trucks, and/or replanting of vegetation, to prevent substantial erosion and siltation during development of the site.

Impact GEO-1: Implementation of the standard measures, SM GEO-1 to SM GEO-2, would ensure that impacts to the project from soil conditions would be less than significant. **(Less Than Significant Impact)**

3.5.2.2 *Seismicity and Seismic Hazards*

As previously discussed, the project site is located in a seismically active region, and therefore, strong ground shaking would be expected during the lifetime of development proposed under the Specific Plan. The project area has a low potential for liquefaction. Parcels in the Specific Plan area located immediately adjacent to the West Little Llagas Creek channel, have the potential for lateral spreading.

Impacts from seismic and seismic-related hazards can be minimized through the use of standard engineering and seismic safety design techniques. Building design and construction would be completed in conformance with project specific geotechnical reports reviewed by the City of Morgan Hill Building Division (see standard measures above) for individual development sites. The proposed development under the Specific Plan would be designed and constructed in conformance with the Uniform Building Code guidelines for Seismic Zone 4 to avoid or minimize potential damage from seismic shaking and seismic-related hazards on the site.

Impact GEO-2: Implementation of the standard measures, SM GEO-1 through SM GEO-2, would ensure that seismic hazard impacts to development under the Specific Plan would be less than significant. **(Less Than Significant Impact)**

3.5.3 Conclusion

Impact GEO-1:	Implementation of the standard measures, SM GEO-1 to SM GEO-2, would ensure that impacts to the project from soil conditions would be less than significant.
Standard Measures	SM GEO-1 and SM GEO-2
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact GEO-2:	Implementation of the standard measures, SM GEO-1 through SM GEO-2, would ensure that seismic hazard impacts to development under the Specific Plan would be less than significant.
Standard Measures	SM GEO-1 and SM GEO-2
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.6 HYDROLOGY AND WATER QUALITY

The following discussion is based in part on a Water Supply Assessment prepared for the project by Akel Engineering in May 2008. A copy of this report is included as Appendix F in this EIR.

3.6.1 Existing Setting

The Downtown and surrounding area of Morgan Hill is located on the floor of the Santa Clara Valley and is mostly developed. The topography of the project area slopes gradually to the south. The Specific Plan area is located within the Llagas Creek watershed.

3.6.1.1 *Drainage*

Runoff from the project area is collected by the City's storm drainage system and eventually flows into Monterey Bay. Land east of the Union Pacific railroad tracks drains into the Butterfield Channel and land west of the railroad tracks drains into the West Little Llagas Creek Channel.

3.6.1.2 *Flooding*

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM), some areas within and near the boundaries of the Specific Plan are located in Zone AE and would be subject to a 100-year flood from West Little Llagas Creek. Flood elevations within the Specific Plan boundaries range from 340 feet to 347 feet above mean sea level (MSL). Flood elevations on Block 19 would be approximately 348 feet msl and approximately 340 feet msl on Block 20. Based on the existing elevation within the downtown area, the 100-year flood would result in flooding one to several feet above the existing grade for the portions of the Specific Plan project area within the floodplain. The mapped flood areas within the Downtown and surrounding area are located west of the Union Pacific Railroad (UPRR) tracks (refer to Figure 20).

The Specific Plan project area has sustained flood damage on twelve occasions in the last 75 years with six of these flood events occurring since 1980. Flooding in 1997 and 1998 resulted in damages to San Martin and Morgan Hill of 350,000 dollars.[21]

Planned Flood Control Improvements

The Upper Llagas Creek Flood Protection Project, also known as PL 566, is intended to provide flood protection for the Cities of Morgan Hill and the unincorporated area of Santa Clara County known as San Martin. The flood control project will consist of a series of channels, box culverts, and bridges designed to protect the floodplain from a 100-year flood. The downstream portion of the flood control project has been completed to Buena Vista Avenue in Gilroy; however, the project has not been completed in Morgan Hill and San Martin due to a lack of funding.

The Santa Clara Valley Water District (SCVWD) is the sponsor of the project and has been working with the U.S. Army Corps of Engineers (COE) to prepare environmental documentation and preliminary design. Progress on the project has been limited to some right-of-way acquisition and preliminary engineering. The PL566 project will be comprised of open channels in the Specific Plan project area except in locations where the creek currently runs under Monterey Road and the

[21] Santa Clara Valley Water District. Llagas Creek Flood Protection Project Status Update 2007. June 2, 2008. http://www.valleywater.org/media/pdf/watershed_monthly_progress_report_pdf/Llagas%20Creek%20status%20report%202007%20.pdf

Source: City of Morgan Hill

DOWNTOWN FLOODPLAIN

FIGURE 20

shopping center on Block 20. At these locations, the creek will continue to flow through box culverts.

Regulatory Overview (Flooding)

The City's Flood Damage Prevention Ordinance (Municipal Code Chapter 18.42.030) is intended to minimize public and private losses due to flood conditions in specific areas of the City. The ordinance restricts or prohibits uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities. The ordinance also requires that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; controls filling, grading, dredging, and other development which may increase flood damage; and prevents and regulates the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

3.6.1.3 *Groundwater*

Groundwater has been measured within 15 feet of the surface in much of the downtown area.[22] The City of Morgan Hill currently relies on local groundwater as its sole water supply source. The groundwater basin underlying the City is part of the Santa Clara Valley groundwater basin and managed by the Santa Clara Valley Water District (SCVWD). The groundwater basin is divided into three interconnected subbasins consisting of the Santa Clara Valley Subbasin and the Coyote Subbasin to the north, and the Llagas Subbasin to the south. The City's water supply comes from the Coyote and Llagas subbasins.

3.6.1.4 *Water Quality*

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

Regulatory Overview (Water Quality)

The major federal legislation governing water quality is the Clean Water Act, as amended by the Water Quality Act of 1987. The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for water quality management nationwide.

The State of California's Porter-Cologne Water Quality Control Act provides the basis for water quality regulation within California; the Act assigns primary responsibility for the protection and enhancement of water quality to the State Water Resources Control Board (SWRCB), and the nine regional water quality control boards. Each Regional Water Quality Control Board (RWQCB) adopts and implements a water quality control plan ("Basin Plan"). The project site is located within the Central Coast region.

[22] Pacific Geotechnical Engineering for the City of Morgan Hill. Geologic Map. December 1991.

The SWRCB has implemented a National Pollution Discharge Elimination System (NPDES) Program. The Central Coast RWQCB issues and enforces NPDES permits for discharges to water-bodies in the portion of Santa Clara County that drains to the Monterey Bay. Projects disturbing more than 10,000 square feet of land during construction are required to file a Notice of Intent (NOI) to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activities.

The State NPDES General Construction Permit requires development and implementation of Storm Water Pollution Prevention Plan (SWPPP) and uses storm water Best Management Practices (BMPs) to control runoff, erosion, and sedimentation from development sites both during and after construction. The SWPPP has two major objectives: 1) to help identify the sources of sediments and other pollutants that affect the quality of storm water discharges; and 2) to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges.

3.6.1.5 *Applicable Morgan Hill Policies and Standards*

Various City policies and standards included in the General Plan, Municipal Code (MHMC), Zoning Ordinance, and Building Code have been adopted for the purpose of avoiding or mitigating hydrology and water quality impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the following development policies and standards:

- *Sewer Capacity, Water Supply and Storm Drainage Policy 22b* – Residents Served by Local Drainage Facilities Should Pay for their Construction and Maintenance
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.2* – Developers Mitigate Drainage Impacts
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.4* – Requires Storm Water Management Plan for Proposed Development
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.6* - Requires Developers to Mitigate Drainage Impacts and Protect Groundwater Quality
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.8* – Compatibility of Detention and Retention Provided with Storm Drainage System Capacity
- *Flood Control Policy 4b* – Prohibit Development in Floodways & Regulate in Floodplains
- *Flood Control Policy 4e* – Leave Streamside and Riparian Areas in Natural State
- *Flood Control Policy 4h* – Development Should Minimize Off-site Flooding/Drainage Problems
- *Flood Control Policy 4j* – Fund Flood Control Facilities Locally in Absence of Federal/State Funds
- *Flood Control Policy 4k* – Mitigate Flood-Inducing Impacts of New Development
- *Flood Control Policy 4l* – Floodproof Development at Developers' Expense (SCJAP 12.05)
- *Flood Control Policy 4m* – Pad Up Structures In Appropriate Situations
- *Flood Control Policy 4o* – Limit Runoff to Pre-development Levels
- *Flood Control Action 4.2* – Designate Floodways as Open Space & Prohibiting Construction
- *Flood Control Action 4.4* – Project Review by Santa Clara Valley Water District Prior to City Approval
- *Flood Control Action 4.6* – Require Dedication of Floodway and Floodplain Areas Pursuant to the PL566 Drainage Program
- *MHMC Chapter 17.32 Improvement and Improvement Agreements*
- *MHMC Chapter 18.42 Flood Damage Prevention*

3.6.2 Hydrology and Water Quality Impacts

3.6.2.1 *Thresholds of Significance*

For the purposes of this EIR, a hydrology and water quality impact is considered significant if the project would:

- Violate any water-quality standards or waste-discharge requirements; or
- Substantially deplete groundwater supplies or interfere substantially with ground-water recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., would the production rate of preexisting nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted?); or
- 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 that would result in substantial erosion or siltation on- or off-site; or
- 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 run-off in a manner that would result in flooding on- or off-site;
- 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 or otherwise substantially degrade surface or ground water quality; or
- Place within a 100-year flood hazard area structures, which would impede or redirect flood flows; or
- 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; or
- Expose people or structures to inundation by seiche, tsunami, or mudflow.

3.6.2.2 *Drainage*

The City's Storm Drain Master Plan does not call for any major improvements to the existing storm drain system in Downtown with the exception of the Upper Llagas Creek Flood Protection Project. The Specific Plan would allow development on sites that are currently vacant or are primarily pervious which may increase stormwater runoff when these sites develop.

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to avoid impacts to the City's storm drainage system.

SM HYDRO-1: In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvement and Improvement Agreements, a complete storm drainage study of the proposed development must be submitted showing amount of runoff, and existing and proposed drainage structure capacities. This study shall be subject to review and approval by the Director of Public Works. All needed improvements will be made by the applicant. No overloading of the existing system will be permitted.

SM HYDRO-2: In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvement and Improvement Agreements, the applicant of development proposed under the Specific Plan shall cause the design and construction to be

undertaken for a storm drainage collection system shown on the tentative map or site development plan. All storm drain improvements shall be constructed to the satisfaction of the Director of Public Works.

SM HYDRO-3: In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvements and Improvement Agreements, proposed collection system in the project area shall be designed to be capable of handling runoff without local flooding. On-site detention facilities shall be designed to a 25-year storm capacity; whereas, on-site retention facilities shall be designed to a 100-year storm capacity. Off-site detention and retention facilities may also be proposed, and are subject to the approval of the Director of Public Works. Items of construction shall include, but not be limited to installation of storm line extensions and surface and subsurface storm drain facilities, manholes with manhole frames and covers, catch basins and laterals.

SM HYDRO-4: Future development will be required to pay the City of Morgan Hill Storm Drainage Impact fee in accordance with Chapter 3.56 of the Morgan Hill Municipal Code. The fees established by this chapter are based on the costs required for new facilities and other capital acquisition costs to serve new development.

Impact HYDRO-1: Implementation of standard measures, SM HYDRO-1 to SM HYDRO-4, would ensure that construction of the proposed development under the Specific Plan would not increase stormwater runoff and would not exceed the capacity of planned stormwater drainage facilities. **(Less Than Significant Impact)**

3.6.2.3 *Flooding*

Development proposed within the Specific Plan area may be located within the floodplain of West Little Llagas Creek and subject to flooding during the lifetime of buildings constructed in these areas (refer to Figure 20). Pending completion of the flood control improvements included in PL 566 these areas may continue to experience flooding during severe storms. Blocks 15 through 18 are the only areas of the project that would not be impacted by flooding.

The project area is located in the dam failure inundation area of Anderson Dam.[23] The precise failure probabilities of dam failure have not been calculated but the probability is considered extremely remote. The SCVWD is mandated by the state to inspect and report on the condition of the dam on an annual basis.

The site is not subject to seiche or tsunami.

Standard Measure: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to reduce and/or avoid flooding impacts:

SM HYDRO-5: Development in the project area shall comply with Morgan Hill Municipal Code Chapter 18.42, the Flood Damage Prevention Ordinance, which requires new residential construction to elevate habitable spaces one foot

[23] Association of Bay Area Governments. Dam Failure Inundation Hazard Map for Morgan Hill. 1995. http://www.abag.ca.gov/cgi-bin/pickdamx.pl

above anticipated flood levels, non-residential construction to be floodproofed, and subgrade floors to withstand hydrostatic flood forces.

SM HYDRO-6: Development proposed in the project area would prepare and submit a Storm Drainage Study to the Director of Public Works for review and approval. The study would include calculations to determine detention and operations and demonstrate how the runoff rate from the proposed development would be less than or equal to existing conditions, or how off-site facilities would be used.

Impact HYDRO-2: Implementation of standard measures, SM HYDRO-5 and SM HYDRO-6, would ensure flooding impacts to proposed development under the Specific Plan would be less than significant. **(Less Than Significant Impact)**

3.6.2.3 *Water Quality*

Construction Phase Impacts

Redevelopment allowed under the Specific Plan and installation of new infrastructure, including grading, demolition, and excavation activities may result in temporary impacts to surface water quality. When disturbance to underlying soils occurs, the surface runoff that flows across construction sites may contain sediments that are ultimately discharged into the storm drainage system.

Post-Construction Phase Impacts

The project area is mostly developed with a mixture of commercial, residential, industrial, and public uses. The circulation and infrastructure improvements proposed by the Specific Plan would occur primarily on existing impervious surfaces. The land use changes and development proposed by the Specific Plan would result in an increase in impervious surfaces in the project area. Undeveloped, permeable, land that would redevelop under the Specific Plan would increase impermeable surfaces and stormwater runoff within the Specific Plan area.

Compared to existing conditions, vehicle use and human activity would increase with the development proposed by the Specific Plan and, as a result, the amount of pollution carried by runoff could increase. The Monterey Road narrowing under the Project Alternate would include removal of the landscaped median which may increase impervious surfaces (depending on the design of the streetscape project) and may increase polluted runoff. Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants such as oil, grease, lead, and animal waste. Runoff from redevelopment in the Downtown area may contain oil and grease from parked vehicles, as well as sediment and chemicals (i.e., fertilizers, pesticides, etc.) from the landscaped areas or new roof areas.

Standard Measure: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measure to avoid construction phase and post-construction water quality impacts:

SM HYDRO-7: Prior to final map approval or issuance of a grading permit the applicant shall complete the following to the satisfaction of the Director of Public Works.

- Storm drain calculations to determine detention pond sizing and operations.
- Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system.
- Water Pollution Control Drawings (WPCD) for Sediment and Erosion Control.

SM HYDRO-8: As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one (1) acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification (WDID) number to the construction site will be issued after the SWRCB receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Public Works Department review. SWPPP shall be made a part of the improvement plans.

Impact HYDRO-3: Implementation of the standard measure, SM HYDRO-7 and SM HYDRO-8, would ensure that construction of the proposed development and infrastructure improvements under the Specific Plan would result in less than significant water quality impacts. **(Less Than Significant Impact)**

3.6.2.4 *Impacts to Groundwater*

The following discussion is based upon a Water Supply Assessment prepared by *Akel Engineering* in May 2008 (Appendix F).

The 2005 Urban Water Management Plan prepared by the Santa Clara Valley Water District (SCVWD) indicates that the operational groundwater storage capacity in southern Santa Clara County is approximately 175,000 to 198,000 acre-feet. Redevelopment allowed in the Specific Plan project area would increase water demand by approximately 495 AFY by 2030. The 2005 Urban Water Management Plan (UWMP) assumed water demand for the Specific Plan project area of approximately 246 AFY. The proposed project; therefore, would result in a greater water demand for the Specific Plan project area, by approximately 249 AFY, than previously assumed in the UWMP.

Based on current demand projections the City of Morgan Hill's water use would increase to 12,827 AFY by 2030 (refer to *Section 3.8 Utilities and Service Systems* and Appendix F). This water demand is approximately 569 AFY less than previously projected in the City's 2005 Urban Water Management Plan. The water demand savings are anticipated to come from conservation efforts including the City's recently adopted Water Conserving Landscapes Ordinance (February 2006). Based on the UWMP, the Llagas and Coyote subbasins would be able to supply approximately

21,600 AFY during normal rainfall years and 21,400 AFY during multiple dry rainfall years. Water supply would be reduced to 8,600 AFY during a single dry year[24].

Based on the passage of recent water conserving ordinances and a reevaluation of citywide proposed water demand, it is anticipated that the existing groundwater supply would be able to meet the water demand of the Specific Plan project area based on projected 2030 development (refer to *Section 3.8 Utilities and Service Systems* and Appendix F).

Redevelopment under the proposed Specific Plan would not result in overdraft of the Llagas or Coyote subbasins and, therefore, would not result in a net deficit in aquifer volume and/or a lowering of the local groundwater table level.

The Specific Plan project area is a developed urban area and intensification of development is not anticipated to affect groundwater recharge in the greater Santa Clara Valley groundwater basin.

Impact HYDRO-4: Buildout of the proposed Specific Plan would not substantially deplete groundwater supplies or interfere with groundwater recharge. **(Less Than Significant Impact)**

3.6.3 Conclusion

Impact HYDRO-1:	Implementation of standard measures, SM HYDRO-1 to SM HYDRO-4, would ensure that construction of the proposed development under the Specific Plan would not increase stormwater runoff and would not exceed the capacity of planned stormwater drainage facilities.
Standard Measures	SM HYDRO-1 through SM HYDRO-4
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact HYDRO-2:	Implementation of standard measures, SM HYDRO-5 and SM HYDRO-6, would ensure flooding impacts to proposed development under the Specific Plan would be less than significant.
Standard Measures	SM HYDRO-5 and SM HYDRO-6
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact HYDRO-3:	Implementation of the standard measure, SM HYDRO-7 and SM HYDRO-8, would ensure that construction of the proposed development and infrastructure improvements under the Specific Plan would result in less than significant water quality impacts.
Standard Measures	SM HYDRO-7 and SM HYDRO-8
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

[24] A single dry year is defined as the year with the minimum usable supply which in this case is 1977, the driest year on record.

Impact HYDRO-4:	Buildout of the proposed Specific Plan would not substantially deplete groundwater supplies or interfere with groundwater recharge.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.7 HAZARDOUS MATERIALS AND HAZARDS

The following discussion is based in part on a County of Santa Clara Department of Environmental Health Leaking Underground Storage Tank Program Public Records Document Search and information obtained from the State Water Resources Control Board "Geotracker" website.

3.7.1 Existing Setting

3.7.1.1 *Soil and Groundwater Contamination*

The project area is almost fully developed with a mixture of industrial, commercial, residential, and public/quasi-public uses. Land uses in the vicinity of the project area include industrial, commercial and residential land uses.

Hazardous materials are commonly used by large institutions, industrial, commercial, and agricultural businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard to the environment when it is improperly treated, stored, transported, disposed, or released in to the atmosphere in the event of an accident. Many of the existing and past businesses located in the downtown area use, store, and dispose of hazardous materials.

Known sources of hazardous material contamination within or near the downtown area in the past, as in most cities in the Bay Area, are the result of leaking underground storage tanks (LUSTs). There are approximately six sites located within the Specific Plan boundary whose contamination is primarily related to gasoline and oil. All of these sites have received case closure. One additional LUST site is located on Block 20 and is currently undergoing monitoring related to a gasoline leak. The locations of sites with known previous and current hazardous materials contamination are shown in Table 3.7-1, below.

Table 3.7-1
Known Contaminated Sites and Regulatory Status

Address	Block	Type	Status
16995 Monterey Rd	Block 20	Gasoline	Open
17015 Monterey Road	Block 14	Gasoline	Closed 6/19/06 Closed 6/27/96
17090 Monterey Road	Block 6	Gasoline	Closed 1/5/98
17485 Monterey Rd	Block 10	Waste Oil/Used Oil	Closed 11/18/98
17500 Depot St	Block 7	Waste Oil/Used Oil	Closed 12/27/95
70 East Fourth Street	Block 5	Gasoline	Closed 7/9/96
91 East Fourth Street	Block 4	Gasoline	Closed 12/16/98

The Union Pacific Railroad (UPRR) right-of-way runs between properties fronting on Depot Street and Butterfield Boulevard. Soils on Blocks 7, 8, and 15 through 18 near the railroad tracks may be contaminated with chemicals that were historically used for dust suppression and weed control along rail lines.

3.7.1.2 *Hazardous Building Materials*

Due to the age of the existing buildings in the Specific Plan area, asbestos containing materials (ACMs) may be present. ACMs are of concern because exposure to ACMs has been linked to cancer. ACMs are defined by the Federal Environmental Protection Agency as materials containing more than one percent (1%) asbestos. Title 8, Section 1529, of the California Code of Regulations (CCR), however, defines asbestos-containing construction material (ACCM) as any manufactured construction material which contains more than one-tenth of one percent (0.1%) asbestos by weight.

Lead-based paint is of concern, both as a source of direct exposure through ingestion of paint chips, and as a contributor to lead interior dust and exterior soil. Lead was widely used as a major ingredient in most interior and exterior oil-based paints prior to 1950. Lead compounds continued to be used as corrosion inhibitors, pigments and drying agents from the early 1950's. In 1972, the Consumer Products Safety Commission limited lead content in new paint to 0.5 percent (5,000 ppm) and in 1978, to 0.06 percent (600 ppm).

Fluorescent light ballasts manufactured prior to 1980 may also contain polychlorinated biphenyls (PCBs).

All three of these substances can pose a threat to human health. Many of the building downtown were built prior to 1980 and are likely to maintain one or more of these materials.

3.7.1.3 *Other Hazards*

The project site is not located within two miles of a public airport, nor is it on one of the City's designated evacuation routes. The Specific Plan project area is not located within a very high fire hazard severity zone.[25]

3.7.1.4 *Applicable Morgan Hill General Plan Policies*

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating hazards and hazardous materials impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Hazardous Materials Policy 3b* – Reduce Risks of Hazardous Materials and Wastes Through Inspection and Monitoring
- *Hazardous Materials Policy 3d* – Inspect Storage Tanks for Compliance with Ordinances
- *Hazardous Materials Policy 3e* – Inspect Facilities with Short Term Hazardous Waste Storage
- *Hazardous Materials Policy 3f* – Require Hazardous Materials Handling Plan for Zone Changes & Use Permits
- *Hazardous Materials Policy3g* – Support County & SCVWD Programs to Encourage Source Reduction & Waste Minimization
- *Hazardous Materials Policy3k* – Monitor Hazardous Materials & Wastes Transportation
- *Hazardous Materials Policy 3l* – Designate Hazardous Materials & Wastes Transportation Routes

[25] State of California Department of Forestry and Fire Protection. Santa Clara County Very High Fire Hazard Severity Zones in Local Responsibility Areas (LRAs). October 8, 2008. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.php

- *Hazardous Materials Policy 3s* – Allow Small Quantity Generators to Locate in Commercial and Industrial Zones
- *Hazardous Materials Policy 3t* – Mitigate Environmental Contamination with New and Expanding Development

3.7.2 Hazards and Hazardous Materials Impacts

3.7.2.1 *Thresholds of Significance*

For the purposes of this EIR, a hazard and hazardous materials impact is considered significant if the project would:

- Create a significant hazard to the public or the environment through the demolition of structures containing hazardous materials or routine transport, use or disposal of hazardous materials; or
- 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; or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school; or
- 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; or
- 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; or
- 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; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- 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.

3.7.2.2 *Existing Soil and Groundwater Contamination*

The project area has been developed for over 100 years with a mix of industrial, commercial, residential, and public/quasi-public land uses. In any developed area with a long history of urban uses hazardous materials accidents have occurred. Leaking underground storage tanks (LUSTs) have contaminated soil and groundwater beneath portions of the project area. All known underground hazardous materials contamination in the project area is currently undergoing remediation and/or has been issued statements of case closure by appropriate regulatory agencies.

The development allowed by the Specific Plan may place sensitive uses (e.g. residential) on parcels previously used by industrial or commercial businesses. Existing and/or previous uses may have resulted in hazardous material concerns not presently known (e.g. oil spills, underground fuel tanks, pesticides or herbicides). The Specific Plan would allow development on parcels that may have been contaminated by hazardous materials such as underground fuel tanks, oil spills, pesticides, and herbicides. The presence of hazardous materials could harm construction workers, the public, and future building occupants.

Redevelopment on the Unocal 76 station parcel (Block 14) may require additional remediation due to the presence of residual MTBE in groundwater. The case closure letter for the site requires notification of the County in the event redevelopment or installation of water wells on the property is proposed. Redevelopment of 16995 Monterey Road (Block 20) would require additional remediation due to the presence of gasoline related organics (GRO), benzene, tuolene, ethylbenzene, and xylene (BTEX), Methyl tert-butyl ether (MTBE), and tert-butyl alcohol (TBA) which exceed Minimal Risk Levels (MRLs). The groundwater extraction and treatment system was shutdown on this site in June 2005 and since the hydrocarbon plume has been relatively stable since that time no further groundwater extraction to control plume migration is anticipated in the near future.[26] In the event Block 20 is redeveloped with residential uses, additional remediation may be necessary.

Impact HM-1: Soil and/or groundwater in the project area may be contaminated by hazardous materials that could be disturbed, exposed, or released due to development and redevelopment in the project area. **(Significant Impact)**

3.7.2.3 *Hazardous Building Materials*

Existing structures in the project area may contain asbestos, lead-based paint, and/or polychlorinated biphenyls. The development and redevelopment proposed by the Specific Plan could include remodel and/or removal of structures containing these materials.

The National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines require that all potentially friable asbestos containing materials be removed prior to building demolition or renovation that may disturb asbestos containing materials (ACMs).

Demolition of buildings that contain lead-based paint may create lead-based dust at concentrations that would expose workers and nearby receptors to potential health risks. State regulations require that air monitoring be performed during and following renovation or demolition activities at sites containing lead-based paint. If the lead-based paint is peeling, flaking, or blistered, it would need to be removed prior to demolition. It is assumed that such paint would become separated from the building components during demolition activities; it must be managed and disposed of as a separate waste stream. If the lead-based paint is still bonded to the building materials, its removal is not required prior to demolition. Currently, the EPA and the U.S. Department of Housing and Urban Development are proposing additional lead-based paint regulations.

Standard Measures: Development in the Specific Plan area is required to conform to the following regulatory programs to reduce impacts due to the presence of ACMs and/or lead-based paint to a less than significant level:

SM HM-1: As appropriate, a lead survey of painted surfaces and soil around buildings on parcels proposed for redevelopment shall be performed prior to demolition. Requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, CCR 1532.1 would be followed during demolition activities, including employee training, employee air monitoring and dust control. Any debris or soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.

[26] SECOR International Incorporated. Quarterly Groundwater Monitoring and Remediation Progress Report, First Quarter 2008, Former BP Service Station No. 11224, 16995 Monterey Road, Morgan Hill, California. April 29, 2008. http://lustop.sccgov.org/files/09S3E28F01f/GWM_R_2008-04-29.pdf

SM HM-2: All potentially friable ACMs shall be removed in accordance with the NESHAP guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities shall be undertaken in accordance with OSHA standards contained in Title 8 of the CCR, Section 1529, to protect workers from exposure to asbestos. Specific measures could include air monitoring during demolition and the use of vacuum extraction for asbestos-containing materials.

SM HM-3: A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.

SM HM-4: Materials containing more than one (1) percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one (1) percent asbestos shall be completed in accordance with BAAQMD requirements.

Impact HM-2: Implementation of the standard measures, SM HM-1 to SM HM-4, would ensure that construction workers and the public would not be exposed to hazardous building materials as a result of implementation of the proposed Specific Plan. **(Less Than Significant Impact)**

3.7.3 Mitigation Measures for Hazards and Hazardous Materials Impacts

3.7.3.1 *Mitigation for Soil and Groundwater Contamination*

MM HM-1.1: A Phase I Environmental Site Assessment shall be required for all properties proposed for redevelopment with residential uses where previous uses include industrial, commercial or agricultural use. If warranted, a Phase II Environmental Site Assessment shall be prepared which identifies specific remediation measures required to ensure the site is suitable for residential development. If contamination is identified on any site within the Specific Plan project area that requires further remediation, such remediation shall be made a condition of approval of the site development permit.

MM HM-1.2: If remediation activities are required on any parcel within the Specific Plan project area, these activities shall be carried out in accordance with a Remediation Plan prepared to address the findings of the Phase II Environmental Site Assessment. The Remediation Plan shall specify the cleanup levels that will be applied and the anticipated regulatory agency responsible for oversight. Potential impacts associated with the remediation activities, such as air and health impacts associated with excavation activities, transportation impacts from removal or remedial activities, and risk of upset in the event of an accident at the site or during transport of contaminated soil shall also be addressed to ensure no significant impacts from implementation of the Remediation Plan.

MM HM-1.3: The Central Coast Regional Water Quality Control Board (RWQCB) and County of Santa Clara Department of Environmental Health Local Oversight Program (LOP) are responsible for overseeing cleanup of contaminated soil and water and for overseeing development activities on contaminated sites.

In accordance with the Fuel Leak Site Case Closure for Unocal #6169 (Case No. 14-668, SCVWDID No. 09S3E28C03f), the County, RWQCB, and the Community Development Department shall be notified prior to any changes in land use, grading activities, excavation, and installation of water wells on the Unocal 76 station parcel of Block 14. A Clearance Letter from either of these agencies outlining site history and any requirements for cleanup or handling of residual contamination shall be submitted to the Community Development Director prior to the issuance of a site development permit.

MM HM-1.4: The Central Coast Regional Water Quality Control Board and County of Santa Clara Department of Environmental Health Local Oversight Program are responsible for overseeing cleanup of contaminated soil and water and for overseeing development activities on contaminated sites. Prior to the issuance of a site development permit on Block 20, a Clearance Letter from either of these agencies outlining site history and requirements for cleanup or handling of residual hydrocarbon contamination on the site shall be submitted to the Community Development Director.

3.7.4 Conclusion

Impact HM-1:	Soil and/or groundwater in the project area may be contaminated by hazardous materials that could be disturbed, exposed, or released due to development and redevelopment in the project area.
Standard Measures	None
Impact After Standard Measures	Significant Impact
Mitigation Measures	MM HM-1.1 through MM HM-1.4
Impact After Mitigation	Less Than Significant

Impact HM-2:	Implementation of the standard measures, SM HM-1 to SM HM-4, would ensure that construction workers and the public would not be exposed to hazardous building materials as a result of implementation of the proposed Specific Plan.
Standard Measures	SM HM-1 to SM HM-4
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.8 UTILITIES AND SERVICE SYSTEMS

The following discussion is based on the City of Morgan Hill's Sewer System Master Plan, Storm Drainage Master Plan, 2005 Morgan Hill Urban Water Management Plan and a Water Supply Assessment prepared by *Akel Engineering* in May 2008. A copy of the Water Supply Assessment is included as Appendix F in this EIR. The Water Supply Assessment is based on the likely development projections for 2030 under the Specific Plan as shown in Table 2.1-2 of this EIR.

3.8.1 Existing Setting

3.8.1.1 *Water Service*

Water Supply Infrastructure

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's water system facilities include 15 groundwater wells, 10 potable water storage tanks, 10 booster stations, and over 160 miles of pressured pipes ranging from two to 14 inches in diameter. The City's water distribution system meets the needs of existing customers. The City has planned and constructed water projects in conjunction with new street construction in anticipation of future growth and water needs. The City's Water Master Plan includes upgrading existing pipelines in the Downtown area to the current eight-inch City standard as well as upgrading the water main from Monterey Road to the Peak Avenue/Main Avenue booster station to 12 inches.

Water Supply

The City of Morgan Hill currently relies on local groundwater as its sole water supply source. The groundwater basin underlying the City is part of the Santa Clara Valley groundwater basin and managed by the Santa Clara Valley Water District (SCVWD). The groundwater basin is divided into three interconnected subbasins consisting of the Santa Clara Valley Subbasin and the Coyote Subbasin to the north, and the Llagas Subbasin to the south. The City's water supply comes from the Coyote and Llagas subbasins.

Groundwater supplies are recharged through infiltration of rainfall, leakage from pipelines, seepage from the surrounding hills, seepage into and out of the groundwater basin, and net irrigation return flows to the basin. In addition the SCVWD has a managed recharge program which percolates local and imported water into the aquifer.[27]

In accordance with the City's 2002 Water System Master Plan, alternatives for siting two new supply wells are being considered which will provide enhanced reliability to the water supply by allowing the City to meet maximum demand and provide standby production capabilities. In 2002, the City of Morgan Hill used approximately 7,535 acre feet of water.[28] Based on the City's 2005 Urban Water Management Plan, water demand in Morgan Hill would be approximately 13,645 acre-feet per year (AFY) in 2030.

The City adopted a Water Conserving Landscapes Ordinance in February 2006 which regulates landscape design, construction, and maintenance. The ordinance is intended to comply with Government Code 65591 (the Water Conservation Landscape Act), and it promotes efficient water

[27] Santa Clara Valley Water District. 2005 Urban Water Management Plan. December 20, 2005.
[28] City of Morgan Hill. 2002 Water System Master Plan. 2002.

use, to manage peak season water demands, and to preserve water storage in order to ensure reliable and adequate public water supply. The ordinance supports a City-wide increase in water conservation.

In June 2007, the SCVWD prepared a memorandum for the South County Water Supply Plan – 2030 Groundwater Demands to determine the baseline water supply conditions for the South County Water Supply Plan project. The groundwater demands were based on documented assumptions and were generally consistent with the District 2005 Urban Water Management Plan. One of the assumptions of this plan included 2030 municipal and industrial (M&I) conservation estimated at 4,092 AFY, based on 2000 Baseline and 2003 Integrated Water Resources Plan (2003 IWRP) "No Regrets" Conservation. As documented by the memorandum calculations, water conservation efforts are anticipated to result in a reduction of the City of Morgan Hill 2030 demands from the Llagas subbasin to 10,475 AFY. Comparing this new projection to the City's 2005 UWMP projection for the Llagas subbasin of 11,192 AFY, results in an estimated conservation of 717 AFY in 2030.

3.8.1.2 *Sanitary Sewer System*

The City of Morgan Hill sewer collection system consists of approximately 135 miles of six-inch through 30-inch diameter sewers, and includes 15 sewage lift stations and associated force mains. The system also consists of trunk sewers, which are generally 12 inches in diameter and larger, that convey the collected wastewater flows through an outfall that continues south to the Wastewater Treatment Facility (WWTF) in Gilroy. The WWTF is jointly owned by the cities of Gilroy and Morgan Hill. The City's existing sewer collection system meets the needs of existing customers. The City has planned and constructed sewer facilities in conjunction with new street construction in anticipation of future growth and sewage needs. Future development will be required to pay the City of Morgan Hill impact fees in accordance with Chapter 3.56 of the Morgan Hill Municipal Code. The fees established by this chapter are based on the costs required for new sanitary sewer facilities and other capital acquisition costs to serve new development.

3.8.1.3 *Storm Drainage System*

The City of Morgan Hill's storm drainage system consists of a combination of curb and gutter facilities, curb inlets, underground pipelines, and bubblers draining to the nearest creek, or to manmade natural retention areas, that flow through the City and are tributary to either Monterey Bay or San Francisco Bay. The City's storm drainage system meets existing drainage needs. The City is planning the construction of storm drainage enhancements in anticipation of future growth and storm drainage needs. The Specific Plan area is currently mostly developed with some large undeveloped parcels.

The Morgan Hill Municipal Code (MHMC) requires that stormwater runoff from subdivisions shall be collected and conveyed by an approved storm drain system that protects abutting and off-site properties that would be adversely affected by increased runoff attributed to development (MHMC 17.32.020B). The City requires on-site detention facilities designed to a 25-year storm capacity and on-site retention facilities designed to a 100-year storm capacity to avoid flooding impacts due to increased runoff. Off-site detention and retention facilities may also be proposed, and are subject to the approval of the Director of Public Works. Future development also would be required to pay the City of Morgan Hill Storm Drainage impact fees in accordance with Chapter 3.56 of the Morgan Hill Municipal Code. The fees established by this chapter are based on the costs required for new storm drainage facilities and other capital acquisition costs to serve new development.

3.8.1.4 *Solid Waste*

South Valley Disposal & Recycling, Inc. (SVDR) provides solid waste and recycling services to the businesses and residents of the cities of Morgan Hill and Gilroy and the surrounding Unincorporated Southern Santa Clara County. Waste is disposed of at Pacheco Pass Landfill which is anticipated to reach capacity in 2008.[29] South Valley Disposal and Recycling, Inc. has contracted through 2017 with the Salinas Valley Solid Waste Authority to dispose of municipal solid waste at Crazy Horse Sanitary Landfill and Johnson Canyon Sanitary Landfill.[30] Crazy Horse Sanitary Landfill is anticipated to reach capacity in 2009 and Johnson Canyon Sanitary Landfill is anticipated to reach capacity in 2040.[31]

3.8.1.5 *Applicable Morgan Hill General Plan Policies*

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating utilities and service systems impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Sewer Capacity, Water Supply and Storm Drainage Policy 20c* – Ensure Adequate Wastewater Treatment Capacity
- *Sewer Capacity, Water Supply and Storm Drainage Policy 21a* – Manage Supply and Use of Water More Efficiently
- *Sewer Capacity, Water Supply and Storm Drainage Policy 21b* – Ensure Adequate Water Supply for New Development
- *Sewer Capacity, Water Supply and Storm Drainage Policy 22a* – Address Flooding Issues
- *Sewer Capacity, Water Supply and Storm Drainage Policy 22b* – Residents Served by Local Drainage Facilities Should Pay for their Construction and Maintenance
- *Sewer Capacity, Water Supply and Storm Drainage Action 20.1* – Update the Sewer Master Plan to Reflect General Plan Changes
- *Sewer Capacity, Water Supply and Storm Drainage Action 20.2* – Review Sanitary Sewer Needs & Plan for Additional Sewer Treatment Capacity
- *Sewer Capacity, Water Supply and Storm Drainage Action 20.3* – Investigate Alternative Wastewater Treatment Methods
- Sewer Capacity, Water Supply and Storm Drainage Action 21.1 – Update the Water Master Plan to Reflect General Plan Changes
- *Sewer Capacity, Water Supply and Storm Drainage Action 21.9* – Work with SCVWD to Encourage Conservation and Efficient Water Use
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.2* – Developers Mitigate Drainage Impacts
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.4* – Requires Storm Water Management Plan for Proposed Development
- *Sewer Capacity, Water Supply and Storm Drainage Action 22.6* - Requires Developers to Mitigate Drainage Impacts and Protect Groundwater Quality

[29] City of Gilroy. Draft Hecker Pass Specific Plan January 2005. September 1, 2005. http://www.ci.gilroy.ca.us/planning/pdf/11hecker_util.pdf

[30] Phil Couchee, General Manager, South Valley Disposal and Recycling, Inc. Personal Communication. February 8, 2008.

[31] California Integrated Waste Management Board. Active Landfills Profile for Johnson Canyon Sanitary Landfill (27-AA-0005). 8 May 2008. http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=27&FACID=27-AA-0005

- *Sewer Capacity, Water Supply and Storm Drainage Action 22.8* – Compatibility of Detention and Retention Provided with Storm Drainage System Capacity

3.8.2 Utilities and Service Systems Impacts

3.8.2.1 *Thresholds of Significance*

For the purposes of this EIR, a utilities and service systems impact is considered significant if the project would:

- Require new or expanded entitlements due to a lack of sufficient water supplies available to serve the project from existing entitlements and resources; or
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or
- 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; or
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or
- 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; or
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid-waste disposal needs;
- Not comply with federal, state, and local statutes and regulations related to solid waste.

3.8.2.2 *Water Supply and Service Impacts*

Water Supply Infrastructure

The current Water Master Plan for the City includes the upgrading of pipelines within the Specific Plan area that would continue to be implemented during the lifetime of the plan. Development proposed under the Specific Plan would occur mostly on underdeveloped sites currently served by the City. The proposed land use changes and development included in the Specific Plan would not require additional pipeline capacity than currently planned for in the Water Master Plan. The upgrading of pipelines within the Specific Plan area would occur within existing roadways and would not result in significant environmental impacts.

Water Supply

A Water Supply Assessment, as required by Senate Bill 610,[32] was completed for the proposed Specific Plan project area based in part on previous water supply analyses completed by the City and SCVWD. The assessment relied on historical and projected water demands through 2030 contained in the City's 2002 Water System Master Plan; water supply facilities, groundwater basin condition, water demand management measures, and a water shortage contingency plan contained in the City's 2005 Urban Water Management Plan (UWMP); the SCVWD's Groundwater Management Plan

[32] Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to the California Environmental Quality Act. Projects requiring a water supply assessment include proposed residential developments of more than 500 dwelling units.

(2001) which documented groundwater supply management programs and goals for ensuring that groundwater resources are sustained and protected; and the 2006 Water Conserving Landscapes Ordinance.

The water demand coefficients used in the Water Supply Assessment were based on coefficients used in projecting the City's wastewater flows from the 2007 technical memorandum prepared for the South County Regional Wastewater Authority. The wastewater flow coefficients were increased ten percent to account for the reduced landscaping needs of the types of development allowed in the Specific Plan project area. These coefficients differ from those used in the City's 2005 UWMP, which were conservatively high, to account for recent conservation efforts in the City. Based on the revised coefficients the water demand for Morgan Hill in 2030 would be approximately 12,827 AFY. This represents a decreased water demand of 569 AFY when compared with the projections in the 2005 UWMP. The water demand projected for the Specific Plan project area in the UWMP is approximately 246 acre feet per year (AFY).

Water demand projections for the Specific Plan project area, with and without the project, are shown in Table 3.8-1.

Table 3.8-1
Water Demand Projections (Acre-Feet per Year)

Year	Specific Plan Projections			Citywide		
	No Project	With Project	Difference	2002 WSMP/2005 UWMP Projections	Revised Demand Projection	Difference
2015	NA	269	--	NA	NA	--
2030	246	495	249	13,396	12,827	569

Projections in the Specific Plan Project Area based upon wastewater flow coefficients, as described in Appendix F.
Sources:
2002 Water System Management Plan
2005 Urban Water Management Plan
Water Supply Assessment for the Downtown Specific Plan, May 2008.

The development proposed under the Specific Plan would result in annual water demand of 269 acre feet per year (AFY) by 2015, which exceeds the 2030 water projections (246 AFY) for the Specific Plan project area contained in the 2005 Urban Water Management Plan. Development in the project area through 2030 would increase demand in the Specific Plan project area by 226 AFY which is approximately 249 AFY greater than projected for the Specific Plan project area in the City's 2005 UWMP.

Impacts of Water Use

Based on the current 2030 water demand projections contained in project's Water Supply Assessment, which took into account recent water conservation efforts, the Citywide projected water demand would be approximately 569 AFY less than identified in the 2005 Urban Water Management Plan. The proposed Specific Plan would result in the need for an additional 249 AFY above the existing demand projected in the 2005 UWMP. Based on the reduced water demand throughout the City the project would not exceed water supplies and the City would maintain a water demand balance credit of 320 AFY when compared to the current UWMP.

The Llagas and Coyote subbasins would be able to supply approximately 21,600 AFY during normal rainfall years and 21,400 AFY during multiple dry rainfall years. Water supply would be reduced to 8,600 AFY during a single dry year[33]. Conservation efforts are anticipated to result in reduction of the City of Morgan Hill 2030 demands from the Llagas subbasin to 10,475 AFY. Comparing this new projection to the City's 2005 UWMP projection for the Llagas subbasin of 11,192 AFY, results with an estimated conservation of 717 AFY in 2030. Although the project is anticipated to increase water demand in the Specific Plan Area by 2030, with increased Citywide conservation, the project is not anticipated to adversely affect groundwater levels.

Based on the Water Supply Assessment prepared for the project, adequate water supplies are available to supply the increased water demand required for redevelopment within the Specific Plan project area due to increased Citywide water conservation.

Impact UTIL-1: Redevelopment in the Specific Plan project area under the proposed Specific Plan is not anticipated to exceed the available water supplies in the Llagas and Coyote groundwater subbasins. **(Less Than Significant Impact)**

3.8.2.3 *Sanitary Sewer System*

The current Sanitary Sewer Master Plan for the City includes the upgrading of sanitary sewer pipelines within the Specific Plan area to current City standards. Development proposed under the Specific Plan, summarized in Table 2.1-2, would occur mostly on underdeveloped sites currently served by the City. The proposed land use changes and development included in the Specific Plan would not require additional sewer pipeline capacity than currently planned for in the Sanitary Sewer Master Plan. The upgrading of sewer pipelines within the Downtown area would occur within existing roadways and would not result in significant environmental impacts.

The South County Regional Wastewater Authority (SCRWA) Wastewater Treatment Plant provides service to the cities of Morgan Hill and Gilroy. The treatment plant has capacity to treat an average dry weather flow (ADWF) of 8.5 million gallons per day (mgd) and is currently permitted by the Regional Water Quality Control Board (RWQCB), Central Coast Region to treat up to 7.5 mgd. This permit will be reopened in 2009 and is expected to allow treatment of 8.5 mgd in line with the current plant capacity. Both the cities of Gilroy and Morgan Hill have growth control systems in place which limit unexpected increases in sewage generation. Based on the most recent wastewater flow projections, a plant expansion would be required in 2012 which would allow for the treatment of 12.75 mgd.[34] The Redevelopment Agency has paid sewer impact fees to fund wastewater treatment plant expansion to accommodate the needs of commercial and residential development in the Specific Plan project area through 2020.

The proposed project is anticipated to increase sewage generation in the City by approximately 218,420 gallons per day by 2015 and an additional 99,043 gallons per day by 2030. Based on permitting data, the current ADWF (April through October) projections show that approximately 297,000 gallons per day (gpd) of treatment plant capacity would remain by 2012 with development of the project (Development Projections through 2015). The treatment plant is expected to expand to accommodate ADWF of 12.75 mgd in 2012 and is currently not anticipated to require further

[33] A single dry year is defined as the year with the minimum usable supply which in this case is 1977, the driest year on record.

[34] MWH Global. Draft Technical Memorandum – South County Regional Wastewater Authoirty Wastewater Flow Projections 2007. February 14, 2008.

expansion until 2030. With the projected development through 2030 envisioned under the Specific Plan, substantial treatment capacity would remain at buildout of the Specific Plan.

Impact UTIL-2: The construction of the proposed development allowed under the Specific Plan would not exceed the planned capacity of the sanitary sewer and treatment systems. **(Less Than Significant Impact)**

3.8.2.4 *Storm Drainage System*

The City's Storm Drain Master Plan does not call for any improvements to the existing storm drain system in Downtown with the exception of the Llagas Creek Flood Protection Project (*refer to Section 3.6 Hydrology and Water Quality*). Although not identified in the Storm Drain Master Plan, future street reconstruction/streetscape projects will include installation of new storm drainage improvements. The Specific Plan would allow development on sites that are currently vacant or are primarily pervious which may increase stormwater runoff when these sites redevelop.

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to avoid impacts to the City's storm drainage system.

SM UTIL-3: In accordance with Morgan Hill Municipal Code Chapter 17.32, a complete storm drainage study of the proposed development must be submitted showing amount of runoff, and existing and proposed drainage structure capacities. This study shall be subject to review and approval by the Director of Public Works. All needed improvements will be made by the applicant. No overloading of the existing system will be permitted.

SM UTIL-4: In accordance with Morgan Hill Municipal Code Chapter 17.32, the applicant for development proposed under the Specific Plan shall cause the design and construction to be undertaken for a storm drainage collection system shown on the tentative map or site development plan. All storm drain improvements shall be constructed to the satisfaction of the Director of Public Works.

SM UTIL-5: In accordance with Morgan Hill Municipal Code Chapter 17.32, proposed collection system systems in the project area shall be designed to be capable of handling a 10-year storm without local flooding. On-site detention facilities shall be designed to a 25-year storm capacity; whereas, on-site retention facilities shall be designed to a 100-year storm capacity. Off-site detention and retention facilities may also be proposed, and are subject to the approval of the Director of Public Works. Items of construction shall include, but not be limited to Installation of storm line extensions and surface and subsurface storm drain facilities, manholes with manhole frames and covers, catch basins and laterals.

Impact UTIL-3: Implementation of standard measures, SM UTIL-3 to SM UTIL-5, would ensure that construction of the proposed development under the Specific Plan would not increase stormwater runoff and would not exceed the capacity of planned stormwater drainage facilities. **(Less Than Significant Impact)**

3.8.2.5 *Solid Waste*

The City of Morgan Hill has contracted with South Valley Disposal & Recycling, Inc. (SVDR) to provide solid waste disposal and recycling service within the City including the Specific Plan project area. SVDR would dispose of solid waste from the project area at Johnson Canyon Sanitary Landfill which as of 2000 had projected permitted capacity of approximately 6,923,297 cubic yards and was expected to remain open through 2040.[35] The proposed project would result in increased waste disposal from the Specific Plan project area of approximately 548.3 tons per year due to residential redevelopment allowed under the Specific Plan.[36] The commercial and office uses proposed in the Specific Plan project area would result in waste generation of approximately 224 tons and 924 tons per year, respectively.[37] The increase in development proposed under the Specific Plan would be served by a landfill with adequate capacity to serve the project.

Impact UTIL-4: Development proposed under the Specific Plan would be served by a landfill with adequate capacity to serve the project. **(Less Than Significant Impact)**

3.8.3 Conclusion

Impact UTIL-1:	Redevelopment in the Specific Plan project area under the proposed Specific Plan is not anticipated to exceed the available water supplies in the Llagas and Coyote groundwater subbasins.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact UTIL-2:	The construction of the proposed development allowed under the Specific Plan would not exceed the planned capacity of the sanitary sewer and treatment systems.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

[35] California Integrated Waste Management Board. Active Landfills Profile for Johnson Canyon Sanitary Landfill (27-AA-0005). 2008. http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=27&FACID=27-AA-0005 Accessed: May 8, 2008.

[36] California Integrated Waste Management Board. Residential Waste Disposal Rates. November 1, 2007. http://www.ciwmb.ca.gov/wastechar/ResDisp.htm Accessed: June 3, 2008.
Based on residential disposal rates of 0.46 tons/unit/year x 1,192 units = 548.3 tons per year.

[37] California Integrated Waste Management Board. Estimated Solid Waste Generation Rates for Commercial Establishments. November 1, 2007. http://www.ciwmb.ca.gov/wastechar/WasteGenRates/Commercial.htm Accessed: June 3, 2008.
Based on waste generation rates for commercial retail uses of 0.0024 tons/sf/year x 93,490 square feet = 224 tons.
Based on waste generation rates for office uses of 0.0108 tons/sf/year x 85,591 square feet = 924 tons.

Impact UTIL-3:	Implementation of standard measures, SM UTIL-3 to SM UTIL-5, would ensure that construction of the proposed development under the Specific Plan would not increase stormwater runoff and would not exceed the capacity of planned stormwater drainage facilities.
Standard Measures	SM UTIL-3 to SM UTIL-5
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact UTIL-4:	Development proposed under the Specific Plan would be served by a landfill with adequate capacity to serve the project.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.9 CULTURAL RESOURCES

The following discussion is based in part upon a Historic Context Statement and historic survey of the Downtown Core prepared by *CIRCA* in 2006 and a Cultural Resources Supplement prepared by *Basin Research Associates, Inc.* in April 2000. These reports are on file with the City of Morgan Hill Community Development Department.

3.9.1 Existing Setting

3.9.1.1 *Archaeological Resources*

Native American occupation and use of the resources in the Morgan Hill area extended over a period of 5,000-7,000 years and maybe longer. The aboriginal inhabitants of the Santa Clara Valley belonged to a group known as the Ohlone (or Costanoans) who occupied the central California coast as far east as the Diablo Range.

The majority of prehistoric archaeological sites in the Morgan Hill area have been found along fresh water sources (such as creeks and springs), in valley areas near water, at the base of the hills and along a major north/south trail. Potential Historic era archaeological sites also follow this pattern and often directly occupy prehistoric sites or are located at their periphery. Historic sites also are often sited along trails, roads, railroad tracks, and along urban and regional street grids.[38]

According to the City's Archaeological Sensitivity Map, much of the Downtown area is archaeologically sensitive due to its location adjacent to West Little Llagas Creek. Archaeological resources from the Historic era associated with the Will Bone House, located on the northeast corner of Del Monte Avenue and West Main Avenue, have been reported adjacent to the Specific Plan boundary (CA-SCl-670H) and Block 9.

3.9.1.2 *Historic Resources*

Overview

Downtown Morgan Hill has experienced several periods of growth beginning with the subdivision of the Morgan Hill Ranch in 1892. The first businesses in the area were the Morgan Hill Times (1892), the Morgan Hill *Sun* (1894), a saloon and a general store. A second wave of development occurred surrounding the incorporation of the City in 1906 which included the founding of the Bank of Morgan Hill in the Votaw Building in 1905. Depot Street was developed with freight and passenger depots which led to the construction of warehouses and lumber yards. As automobiles became more prevalent, Monterey Road became part of US 101 and many businesses were opened along Monterey Road between Dunne and Main Avenues including the Friendly Inn (1919), Skeels Hotel (1926), The Empire Theater (1912), The Granada (1923)[39], gas and service stations, motor court motels, restaurants, and shopping venues. Many of the remaining buildings in the Specific Plan project area date the period of growth following World War I.[40]

[38] Basin Research Associates, Inc. 2000. Cultural Resources Supplement, Archaeological Resources Morgan Hill General Plan Santa Clara County, California.
[39] The original Granada Theater, located on the block immediately south of its current location, was built in 1923 and burned down in 1949. The theater moved to its current location in 1951.
[40] CIRCA. Historic Context Statement for the City of Morgan Hill. October 2006.

Eligibility Criteria for Historic Resources

In September 1992, Assembly Bill 2881 was signed which created more specific guidelines for identifying historic resources during the project review process under CEQA. These guidelines are set forth in Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a). These provisions of CEQA create three categories of historical resources: mandatory historical resources; presumptive historical resources; and resources that may be found historical at the discretion of the lead agency. These categories are described below.

- *Mandatory Historical Resources.* A resource the State Historical Resources Commission lists on the California Register of Historical Resources, or the State Historical Resources Commission determines to be eligible for listing in the California Register is defined by CEQA to be "an historical resource." Resources are formally listed or determined eligible for listing by the State Historical Resources Commission in accordance with the procedures set forth in the provisions of State Law relating to listing of historical resources.[41] If a resource has been listed on the State Register, or formally determined to be eligible for listing by the State Historical Resources Commission under these procedures, it is conclusively presumed to be an "historical resource" under CEQA.

- *Presumptive Historical Resources*. A resource included in a local register of historic resources as defined by State law[42] or identified as significant in an historical resource survey meeting the requirements of State law,[43] shall be presumed to be historically or culturally significant. The lead agency must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- *Discretionary Historical Resources*. A resource that is not determined to be a significant historical resource under the criteria described above, may, in the discretion of the lead agency, be found to be a significant historical resource for purposes of CEQA, provided its determination is supported by substantial evidence in light of the whole record. The CEQA Guidelines further provide that generally, a lead agency should consider a resource historically significant if the resource is found to meet the criteria for listing on the California Register of Historical Resources, including the following:

    1. The resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States; or

    2. The resource is associated with the lives of persons important to local, California, or national history; or

[41] These procedures are set forth in Public Resources Code § 5024.1 and 14 Cal. Code Regulations §§ 4850, et. seq.
[42] These State law standards defining a local register of historical resources are set forth in Public Resources Code section 5020.1(k). Under section 5020.1(k), a local register of historical resources is a "list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution."
[43] These State law standards defining the requirements for an historical resource survey are set forth in Public Resources Code section 5024.1(g). Under section 5024.1(g), a resource can be identified as "significant" in an "historical resources survey" and found to be significant by the State Office of Historic Preservation ("SOHP") (i.e., listed in the California Register). Three criteria must be met: (1) the survey has or will be included in the State Historic Resources Inventory; (2) the survey and documentation were prepared in accordance with State Office of Historic Preservation procedures and requirements; and (3) the State Office has determined the resource has a significance rating of Category 1 to 5 on Form 523.

3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values, or

4. The resource has the potential to yield information important to the prehistory or history of the local area, California or the nation.[44]

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

City of Morgan Hill Historical Resources Ordinance

The City's Historical Resources Ordinance, is contained in Chapter 18.75 of the Morgan Hill Municipal Code.

Both the existing and proposed revisions to the Historic Resources Chapter of the municipal code provide for the City to identify significant historical resources and to require permits to alter historic resources. Historic resources, including an object, building, structure, site, area, district, unique archaeological resource, place, record, or manuscript may be classified a designated historical resource based on its age, integrity and historical significance.

Existing Historic Resources

The following discussion of existing historic resources is based upon a reconnaissance survey of the Downtown Area by CIRCA, the City's Historic Context Statement, and a review of properties with significant historical resources as recognized by resolution or ordinance the City of Morgan Hill.

A Reconnaissance Survey was conducted by CIRCA in 2006 and 2007 to identify potential historical resources in Morgan Hill. This survey included a review of structures greater than 45 years of age within the Downtown. Based on the survey, intensive evaluation were completed to assess the historical significance of 30 structures. Based on the evaluations, 16 structures were identified as potentially eligible for local listing and were considered for determinations of local significance (and inclusion on the Adopted Survey List) by the Morgan Hill Planning Commission and City Council. This process resulted in the placement of five additional buildings and one historical object on the City's designated historic resources lists (the Adopted Survey List). Recognized historic resources in the Specific Plan area are listed in Table 3.9-1. One structure, the parsonage of the United Methodist Church was determined to contribute to the historic significance of the Methodist Church property and the property as a whole is considered eligible for the California Register of Historical Resources. The Mason & Triggs Building and the Granada Theater's historic features, were also designated as historic resources by the Morgan Hill City Council in June 2008. No historic districts have been identified within the Specific Plan area.

[44] See CEQA Guidelines Section15064.5(a)(3) and California Office of Historic Preservation *Technical Assistance Series #6*, March 14, 2006.

Table 3.9-1
Designated Historic Resources

Resource	Address	Date
Hatch House	35 West Main Avenue	1907
Bone House	95 West Main Avenue	1899
Bruzzone House	145 West Main Avenue	1890s
Page House	17100 Monterey Road	1908
Methodist Church[1]	17175 Monterey Road	1893
Methodist Church Parsonage[1]	17175 Monterey Road	1895
Votaw Building	17400 Monterey Road	1905
Grange Hall	40 East Fourth Street	1909
McCreery House	25 West Fourth Street	1907
Newbold House	20 East Fifth Street	1904
George Edes House	95 West First Street	1899
Old Presbyterian Parsonage	50 West First Street	1897
Residence	45 West Dunne Avenue	c. 1900
Residence	65 West Dunne Avenue	1936
Mason & Triggs Building[2]	17415 Monterey Road	Unknown
Granada Theater[3]	17440 Monterey Road	1951

Notes:
Italicized buildings were listed as Designated Historic Resources in May and June 2008.
[1] The Methodist Church is considered by CIRCA to be potentially eligible for the California Register of Historic Places.
[2] The Mason & Triggs building is considered a potentially historic resource.
[3] The Granada Theater building itself has been substantially altered and is not an historic building; however, the City Council determined that the sign/marquee was a significant local historic object.

Subsequent historic evaluations were completed in November 2008 for four additional sites within the Downtown Core over 45 years of age. Although they have not been added to the Adopted Survey list, the granary buildings and silos at 17500 Depot Street appear to meet the local criteria for listing. The silos are key character defining features of the property that were found to communicate the historic character and agricultural function of the site. The residence at 40 East Second Street was also found to meet the criteria for local listing based on its construction early in Morgan Hill's development and retention of notable architectural details, form, and massing conveying historic character. The two other structures evaluated in November 2008 (17365 to 17385 Monterey Road and 91 East Fourth Street) were not found to qualify for listing at the national, state, or local level.

None of the designated historic resources within the Specific Plan area are listed on the California Register of Historical Resources or the National Register of Historic Resources. The Morgan Hill House (Villa Miramonte), located approximately 0.4 mile north of the Specific Plan project area at 17860 Monterey Road, is the only City Designated Historic Resource that is also listed on the National Register of Historic Resources.

The Methodist Church is considered eligible for the California Register of Historical Resources and therefore is a *Presumptive Historic Resource* under CEQA. The other historic resources listed in Table 3.9-1 have been designated or otherwise identified as resources with local significance. Historic resources placed on the City's Local Register are also considered *Presumptive Historical Resources* under CEQA.

3.9.1.3 *Applicable Morgan Hill General Plan Policies*

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating cultural resource impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Historic Preservation Policy 8a* – Encourage Preservation & Rehabilitation of Historic Structures
- *Historic Preservation Action 8.2* – Identify & Protect Heritage Resources (SCJAP 15.09)
- *Historic Preservation Action 8.3* – Evaluate Alternatives to Demolition of Historically Significant Buildings
- *Historic Preservation Action 8.4* – Designate Historically Significant Cultural Resources & Offer Rehabilitation Loans or Grants

3.9.2 Cultural Resources Impacts

3.9.2.1 *Thresholds of Significance*

For the purpose of this EIR, a cultural resources impact is considered significant if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

3.9.2.2 *Impacts to Archaeological Resources*

The Specific Plan project area is generally considered archaeologically sensitive. Blocks 1, 7, 8 and Blocks 15-19 are the only blocks not located in an archaeologically sensitive area according to the City's Archaeological Sensitivity Map. Due to the location of a substantial portion of the Downtown within an archaeologically sensitive area, future development and redevelopment projects allowed under the Specific Plan could result in impacts to buried archaeological resources during soil disturbing activities.

Standard Measures: In accordance with the City of Morgan Hill Municipal Code Chapter 18.75, proposals for the development or redevelopment of a site identified as archaeologically sensitive by the City's adopted archaeological sensitivity map shall be subject to the following review process and standard conditions of project approval:

SM CULT-1: The City will consult with the Northwest Information Center for information about whether proposed development is located within or adjacent to a known archaeological site, and if it is determined that it is so located, then a historical alteration permit is required for the project, and subsequent CEQA review of the project shall consider potentially significant impacts on archaeological resources and identify appropriate mitigation measures to be

imposed as conditions of approval in addition to the standard conditions identified below.

SM CULT-2: If the project is not located within or adjacent to a known archaeological site, but is located within the mapped archaeologically sensitive area as adopted by the City, then the project applicant has the option to either have an archaeological survey be completed for the site to determine what, if any, conditions of approval will be required as mitigation measures; or agree to comply with the following standard conditions of approval, which shall be conclusively deemed to reduce potentially significant impacts on archaeological resources to a less than significant level (no archaeological resources report is required as part of any CEQA review of the project as long as the applicant accepts these conditions and incorporates them into the project):

- An archaeologist shall be present on-site to monitor all ground-disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:
  - Work at the location of the find will halt immediately within thirty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;
  - If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
  - If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and
  - If the resource cannot be avoided, the archaeologist shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the community development director. The action plan shall be in conformance with California Public Resources Code 21083.2.

SM CULT-3: All development projects located within an archaeological sensitivity area and/or containing known archaeological resources on-site shall also be subject to the following measures as standard conditions of project approval:

- This project may adversely impact undocumented human remains or unintentionally discover significant historic or archaeological materials. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans.
  - If human remains are encountered they shall be treated with dignity

and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
    - Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
    - Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
- In the event that known or suspected Native American remains are encountered or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.
- An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or discovery, by the Monitoring Archaeologist (typically 25-50ft for single burial or archaeological find).
- The exclusion zone shall be secured (e.g., 24 hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
- The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
    - The City of Morgan Hill Community Development Director
    - The Contractor's Point(s) of Contact
    - The Coroner of the County of Santa Clara (if human remains found)
    - The Native American Heritage Commission (NAHC) in Sacramento
    - The Amah Mutsun Tribal Band
- The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
- The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) from the Amah Mutsun Tribal Band. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
- Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.

- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's community development director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the Amah Mutsun Tribal Band may be considered and carried out.
- If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Impact CULT-1: Implementation of standard measures, SM CULT-1 to SM CULT-3, would ensure that development under the Specific Plan would not result in significant impacts to archaeological resources. **(Less Than Significant Impact)**

3.9.2.3 *Impacts to Historic Buildings*

Within the Specific Plan project area the City has designated 16 local historical resources, including one site considered eligible for the California Register of Historical Resources. In addition, two potential local historic resources, the granary building and silos at 17500 Depot Street and the residence at 40 East Second Street, are located within the Downtown Core. Redevelopment within the Specific Plan project area could occur on parcels containing historical resources in Blocks 2, 3, and 5-18. There are no local historic resources on Blocks 1, 4, 19 and 20 and future redevelopment would not result in impacts to currently identified historical resources.

With the exception of the relocation of Granada Theater sign, the Specific Plan does not identify specific activities (i.e., renovation or redevelopment of specific properties) that would directly impact historic buildings or historic objects in the Downtown. The land use assumptions in the Specific Plan for Block 2 (along Monterey Road between E. 1st Street and E. 2nd Street) includes redevelopment of ground-floor retail uses with offices or residential on the upper floor(s). The Specific Plan would allow for either retention of the Granada Theater, or demolition and redevelopment of that block. The Specific Plan would also allow for construction of a new theater in the downtown area, with the existing Granada sign/marquee to be relocated to that new theater use. The projected redevelopment also offers the potential for a parking structure internal to Block 2 or underground parking.

One of the design guidelines in the proposed Specific Plan states that modifications to historic structures should be done in a manner that is consistent with the Secretary of Interior's standards. While the guideline advises that such changes "should" be consistent, it is assumed for the purposes of this Master EIR that they will be consistent. Any changes to a National Register, California Register, or locally designated structure that are not consistent with the Secretary of Interior's standards is not covered by this Master EIR and will require subsequent environmental review, possibly a new EIR, in compliance with Chapter 18.75 of the Municipal Code.

The City of Morgan Hill Historic Resources Code (Chapter 18.75 of the Municipal Code) was recently revised and those revisions became effective in August 2008. The standard measures listed below are from the current Municipal Code and are required by law.

Standard Measures: In accordance with the City of Morgan Hill Municipal Code Chapter 18.75, development in the project area would be subject to the following conditions at the time permit applications are filed to avoid impacts to historic buildings:

SM CULT-4: It is unlawful for any person to alter or modify character-defining features of a potentially significant or significant historical resource, a resource that has been formally designated or listed on the city's adopted survey list, or which lies within an historic district, without first obtaining a historical alteration permit. Neither the community development director nor the building official shall grant any permit to carry out such work without the approval of a historical alteration permit. [MHMC 18.75.045]

SM CULT-5: If a historical alteration permit is required, the historical alteration permit application shall be submitted to the Community Development Department for review and approval. City Staff will review applications for compliance with the Secretary of the Interior's Standards and may require that the applicant deposit funds for the city to retain the services of a qualified historic consultant if necessary. Supplemental environmental review of a historical alteration permit application will be required if the proposed alteration or modification is not in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. If the proposed alteration or modification is in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the project would be exempt from further CEQA review unless other factors are identified which could cause other potentially significant environmental impacts. The Community Development Director may also require a historical alteration permit application to be reviewed and approved by the Planning Commission at his/her discretion. As part of the review process, the Community Development Director or Planning Commission may impose conditions on a project to bring the proposed work into compliance with the Secretary of the Interior's Standards. [MHMC 18.75.045]

SM CULT-6: Neither the Community Development Director nor the Building Official shall grant any permit to tear down, demolish, remove or relocate a potentially significant or significant historical resource without the prior approval of a historical resources demolition or relocation permit by the Planning Commission pursuant to the procedures outlined in the Morgan Hill Municipal Code Chapter 18.75.050. In the case of a proposal to move a designated historical structure that is not National Register listed but is a locally designated historical resource, the Community Development Director shall obtain sufficient information to ensure the new location substantially recreates the original location in terms of siting, setback, ordinal orientation and all other features that marked the original location, in order to retain its local register status.

Granada Theater Sign/Marquee

As described above, implementation of one of the Specific Plan land use actions, to retain theater uses downtown, also would allow for relocation of the theater uses within the downtown area. The City is currently considering the relocation of the Granada Theater upright sign and marquee, a local historic object[45] (Photo 1), to a new mixed-use theater building on Block 3, one block south of its current location.

In a recent review of the proposed relocation and reuse of the Granada Theater upright sign and marquee, CIRCA notes that the upright sign and marquee do not meet National or California register criteria or criteria for listing on the local register per the City's Historical Resources Ordinance. Since the upright sign and marquee nonetheless were placed on the City's Adopted Survey List (a local register) in an ordinance adopted by the City Council, for the purposes of this EIR, the upright sign and marquee is considered a "presumptive" historical resource as described in *Section 3.9.1.2 Historic Resources* of this EIR.

The City Council identified the upright sign and marquee as comprising the historic object. Retention of all aspects of the grid behind the marquee is not considered mandatory from the historic resource preservation standpoint, although the grid does contribute to the setting and feeling associated with the historic sign/marquee and the extent of grid preservation would be a factor discussed under the Historic Relocation Permit/Design Permit process, described above. Relocating the sign and marquee to Block 3 within the Downtown area would maintain the long-time association of the Granada Theater with Downtown Morgan Hill. The theater has operated at two different locations within the Downtown, although the existing sign has only been at the current location at 17440 Monterey Road.
The proposed relocation of the sign one block south of its existing location as part of a new theater development would not result in a significant impact to the sign and marquee since they would be reused and placed on a theater building in a downtown setting in Morgan Hill, which is an appropriate association.[46]

Impact CULT-2: Development currently proposed under the Specific Plan would relocate the Granada Theater upright sign and marquee to a new theater building within the Downtown. The proposed relocation of the sign and marquee one block south would not result in a substantial impact to this locally designated historic object since it would maintain the long-time association of the Granada Theater sign with the central Downtown area. **(Less Than Significant Impact)**

[45] The Granada Theater sign and marquee do not meet the National or California Register criteria for listing as a historic resource but were designated by the City Council as a locally significant historic object.
[46] CIRCA: Historic Property Development. *Relocation and Re-use of Granada Theater Sign and Marquee*. June 12, 2009.

3.9.3 Conclusion

Impact CULT-1:	Implementation of standard measures, SM CULT-1 to SM CULT-3, would ensure that development under the Specific Plan would not result in significant impacts to archaeological resources.
Standard Measures	SM CULT-1 to SM CULT-3
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact CULT-2:	Development currently proposed under the Specific Plan would relocate the Granada Theater upright sign and marquee to a new theater building within the Downtown. The proposed relocation of the sign and marquee one block south would not result in a substantial impact to this locally designated historic object since it would maintain the long-time association of the Granada Theater sign with the central Downtown area.
Standard Measures	SM CULT-4 to SM CULT-6
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

PHOTO 1 - GRANADA THEATER SIGN

3.10 BIOLOGICAL RESOURCES

The following discussion is based in part upon a biological constraints survey completed in the Specific Plan project area in May 2004 by *Live Oak Associates*.[47]

3.10.1 Existing Setting

The Specific Plan area is developed with a mixture of commercial, residential, industrial, and public/quasi-public uses. The Specific Plan area contains some hillside and riparian areas in Blocks 11 through 14 and some vacant or undeveloped parcels on Blocks 1, 4, 5, 7, 18, and the CCR parcel south of Myrtle Avenue. Development proposed under the Specific Plan would primarily occur in a developed urban area.

West Little Llagas Creek is an intermittent stream that flows through the western portion of the Specific Plan area, Blocks 11 through 14, and Block 20. The reach of West Little Llagas Creek is highly disturbed with development occurring up to and over the stream channel. In some locations the creek flows under developed sites, such as portions of Block 11 and Block 20. Plant species along the banks of the creek are primarily non-native weedy species. The stream channel contains scattered trees which provide very little riparian habitat. Overall, the habitat quality of the creek through the downtown area is poor.

The Specific Plan area is not within an adopted Habitat Conservation Plan or other approved local, regional, or state habitat conservation plan.

A HCP/NCCP is currently being prepared for the Santa Clara Valley. The Santa Clara Valley HCP/NCCP is a regional partnership between six local partners (the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the Cities of San José, Gilroy and Morgan Hill) and three wildlife agencies (the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service (NMFS-NOAA Fisheries).[48] The HCP/NCCP process is anticipated to be completed in 2010.

The HCP/NCCP will address listed species and species that are likely to become listed during the plan's proposed 50-year permit term and associated habitats. The species of concern include, but are not limited to, the California tiger salamander, California red-legged frog, western burrowing owl, Bay checkerspot butterfly, and a number of species endemic to serpentine grassland and scrub. As noted below under Special Status Species, the project area is primarily urban, and with the exception of some possible use by burrowing owls or tree-nesting raptors, the downtown is not suitable habitat for the species that are currently being studied as a part of the HCP/NCCP process.

3.10.1.1 *Special-Status Species*

Habitats in developed urban areas are extremely low in species diversity. Species that use this habitat are predominantly urban adapted birds such as the Mourning Dove, Rock Dove, House Sparrow, and Starling. Other wildlife species adapted to human activity that may inhabit the area and creek corridor include raccoons and opossums.

[47] Live Oak Associates, Inc. Biological Constraints Survey. May 11, 2004.
[48] Source: Santa Clara Valley HCP/NCCP website. October 2006
[http://www.scv-habitatplan.org/www/default.aspx]

Tree-Nesting Raptors

Mature trees in the Specific Plan project area may provide habitat for tree-nesting raptors that can adapt to urban settings, such as Cooper's Hawk, Barn Owl, and Great Horned Owl.

Burrowing Owls

The Specific Plan area contains a few underutilized parcels which could provide habitat for Burrowing Owls. Although the Downtown is substantially developed with urban uses, there is limited suitable habitat for burrowing owls in the non-native grasslands/ruderal areas next to the UPRR tracks on a portion of Block 18 and in the recreational fields on Block 19. Unirrigated open field habitat is also present on several sites in the CC-R zoning district.

Citywide Burrowing Owl Habitat Mitigation Plan

In June 2003, the City of Morgan Hill adopted the Citywide Burrowing Owl Habitat Mitigation Plan. The purpose of the plan was to create a comprehensive program to mitigate impacts to Burrowing Owls and their habitat, instead of addressing such impacts on a project by project basis. This plan meets the requirements of CEQA and is based on the following two assumptions:

1. All development – both that which eliminates actual habitat and nearby development that does not result in a direct loss of owl habitat – affects burrowing owl populations to some degree; and

2. Mitigating impacts is most logically addressed by managing a fixed amount of habitat capable of supporting owls.

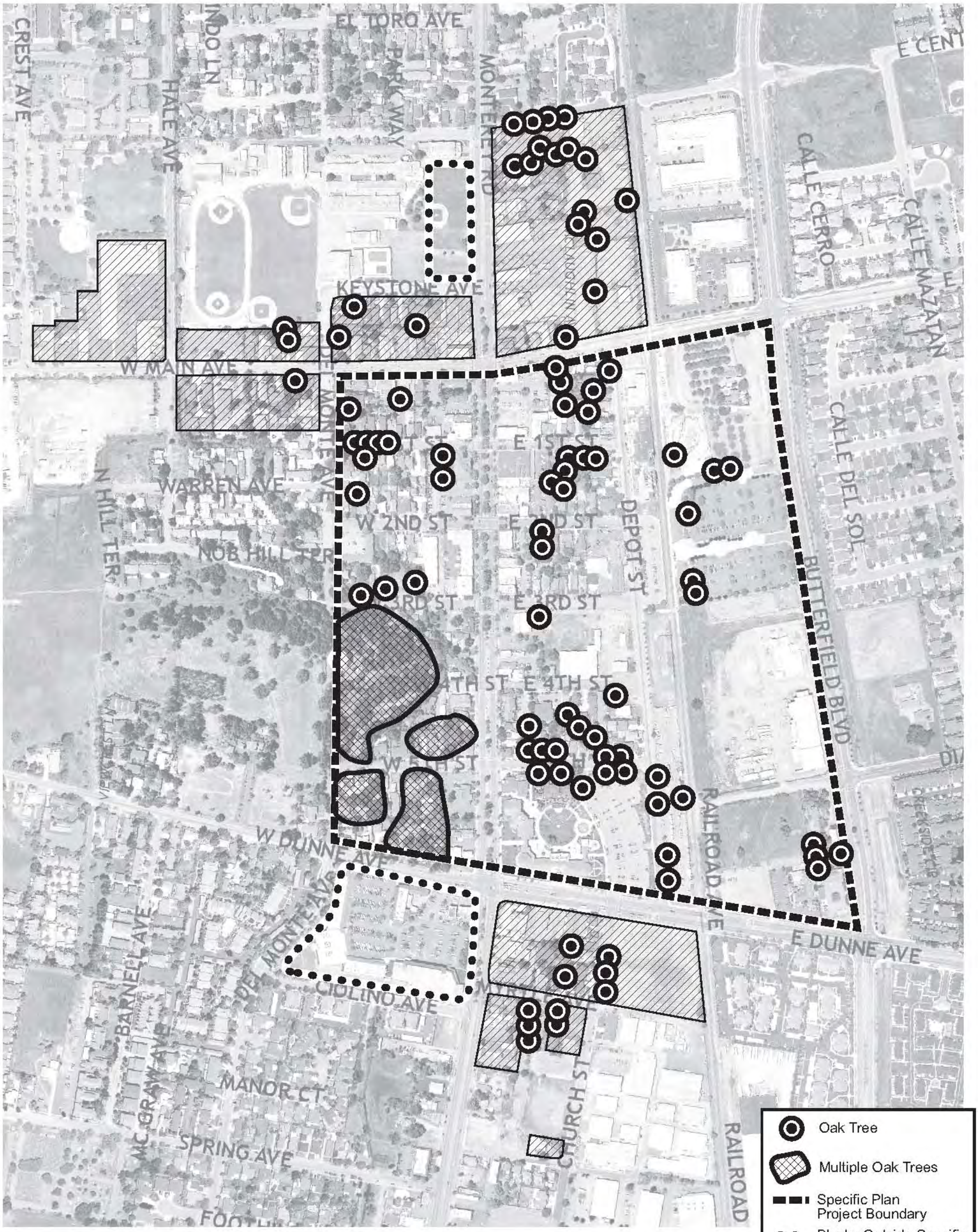
The Citywide Burrowing Owl Habitat Mitigation Plan's strategy addresses both assumptions by preserving a specific amount of suitable land and spreading the costs fairly over development projects that impact owls and owl habitat directly and indirectly.

Lands that are below 600 feet elevation above sea level that support any grassland and/or mixed herbaceous vegetation upon which activity is proposed that is defined as a "project" by CEQA and is not statutorily or categorically exempt from CEQA are subject to the Citywide Burrowing Owl Habitat Mitigation Plan.

After the Santa Clara Valley HCP/NCCP is adopted by the City of Morgan Hill, the June 2003 Citywide Burrowing Owl Mitigation Plan will no longer be in effect; it will be superceded by the HCP/NCCP and its standard requirements, conditions and fees.

3.10.1.2 *Mature Trees*

Mature trees are located on many of the blocks within the Specific Plan project area. Most are planted landscape and street trees; however, the Specific Plan project area also contains indigenous trees such as coast live oak and valley oak as shown by the aerial photograph of the project area (refer to Figure 21). Large, mature indigenous oak trees are found on parcels located on First Street, Second Street, Third Street, Fourth Street, Fifth Street, Main Avenue, Dunne Avenue, Depot Street, Butterfield Boulevard, Monterey Road, and on the slopes of Nob Hill, at the western edge of the Specific Plan project area.



MATURE OAK TREES
IN THE DOWNTOWN SPECIFIC PLAN PROJECT AREA

FIGURE 21

The City of Morgan Hill Municipal Code (Chapter 12.32) Significant Tree Removal Ordinance regulates the removal of trees in the City. These Controls serve to protect all indigenous (native) trees having a trunk measuring 18 inches or more in circumference and nonindigenous trees measuring 40 inches or more in circumference, at a height of four and one-half feet above the natural grade of slope. In addition, any tree found to be part of a "community of trees" such that the loss of several of the trees will cause a significant ecological, aesthetic, or environmental impact, regardless of tree size or species, are also protected. A tree removal permit is required from the City of Morgan Hill for removal of any such trees. All commercial tree farms, non-native tree species in residential zones and orchards (including individual fruit trees) are not protected by the City of Morgan Hill Tree Removal Controls. Trees of any size within the public right-of-way, such as the median of Monterey Road, are also protected under the Municipal Code.

As outlined above, trees are scattered throughout the Specific Plan project area, including on some of the parcels proposed by the Specific Plan for General Plan amendments and development, and along portions of the West Little Llagas Creek pedestrian/bicycle trail.

3.10.1.3 *Applicable Morgan Hill Policies and Standards*

Various City policies and standards included in the General Plan and Municipal Code (MHMC) have been adopted for the purpose of avoiding or mitigating biological resource impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the following development policies and standards:

- *Riparian Areas Policy 5a* – Encourage Reclamation of Degraded Streams & Riparian Areas
- *Riparian Areas Policy 5b* – Maintain Riparian Systems in Open Space (SCJAP 16.10)
- *Riparian Areas Policy 5c* – Implement West Little Llagas Creek Streamside Park (SCJAP 16.12)
- *Plants and Wildlife Policy 6e* – Identify & Protect Wildlife, Rare & Endangered Plants and Animals (SCJAP 15.09)
- *Plants and Wildlife Policy 6g* – Encourage Use of Native, Drought-Resistant Plant Species
- *Plants and Wildlife Action Item 6.3* – Mitigate Development Impacts on Wildlife in Riparian Areas
- *MHMC Chapter 12.32 Significant Tree Removal Ordinance*

3.10.2 Biological Resources Impacts

3.10.2.1 *Thresholds of Significance*

For the purposes of this EIR, a biological resources impact is considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or
- 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, or

- 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, or
- Conflict with any local ordinances protecting biological resources, such as a tree preservation ordinance, or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.10.2.2 *Special-Status Species*

Due to the highly urbanized nature of the Specific Plan area, proposed development would not result in impacts to special-status plant and wildlife species, with the exception of raptors (birds of prey) that could use the trees and vacant sites in the Specific Plan area for nesting.

Tree-Nesting Raptors

Although the project area is primarily used by species accustomed to developed areas, some nesting raptors (i.e., falcons, hawks, eagles, owls) may use the area and are protected under provisions of the Migratory Bird Treaty Act and the California Department of Fish and Game (CDFG). The Federal Migratory Bird Treaty Act (MBTA; 16 U.S.C., §703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance on the site during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA.

Migratory birds are also protected in California. The State Fish and Game Code §3503 emulates the MBTA and protects birds' nests and eggs from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the California Department of Fish and Game (CDFG).

Finally, raptors (e.g., eagles, hawks, and owls) and their nests are protected under both Federal and State laws and regulations. In addition to the Federal Migratory Bird Treaty Act birds of prey are protected in California under Fish and Game Code §3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." In addition, the State Code includes a section enforcing the Migratory Bird Treaty Act.

Tree removal, especially of large mature trees, during the January to August nesting season could impact tree-nesting raptors, such as Cooper's Hawk, Barn Owl, and Great Horned Owl.

Impact BIO-1: Tree removal during the nesting season could impact protected tree-nesting raptors. Any loss of fertile bird eggs, or individual nesting birds, or any activities resulting in nest abandonment during construction, would constitute a significant impact. **(Significant Impact)**

Burrowing Owls

Currently, there are no known nesting burrowing owls in the City of Morgan Hill.[49] Burrowing owls may be present at the time development is proposed under the Specific Plan, however, on sites that are currently vacant or undeveloped, including adjacent to the UPRR tracks. Construction activities during the nesting season could disturb or destroy occupied nests, resulting in the loss of reproductive effort. The value of the breeding habitat is not considered high, due to the urban development on vacant and undeveloped parcels in the Specific Plan area. The loss of reproductive effort for these birds would result in a significant impact.

Standard Measures: In conformance with the City's Burrowing Owl Habitat Mitigation Plan, development proposed on vacant or undeveloped sites (portions of Blocks 1, 4, 5, 7, 8, 17, 18, and the CC-R zoning district) shall include the following measures to avoid impacts to burrowing owls:

SM BIO-1: A pre-construction survey shall be conducted by a qualified Burrowing Owl biologist no more than 30 days prior to initiation of any ground disturbing (construction) activity to assure take avoidance of burrowing owls. The survey shall consist of a habitat assessment, burrow survey, owl survey, and completion of a written report. If owls are observed during the pre-construction survey, no impacts to the owls or their habitat will be allowed during the nesting season (February 1 to August 31).

SM BIO-2: Should burrowing owls be found on the site during the breeding season (February 1 through August 31), exclusion zones with a 250-foot radius from occupied burrows, shall be established. All development-related activities shall occur outside of the exclusion area until the young have fledged.

SM BIO-3: If pre-construction surveys are conducted during the non-breeding season (September 1 through January 31) and burrowing owls are observed on the site, the owls may be relocated upon approval of the California Department of Fish and Game, in accordance with the Burrowing Owl Mitigation Plan.

Impact BIO-2: Conformance with the City's Burrowing Owl Habitat Mitigation Plan (or any adopted HCP/NCCP), including standard measures, SM BIO-1 through SM BIO-3, would ensure impacts to burrowing owls would be less than significant. **(Less Than Significant Impact)**

3.10.2.3 *Mature Trees*

Mature trees are located on various parcels throughout the Specific Plan project area. Development under the proposed Specific Plan could result in impacts to individual trees and communities of trees as defined in Chapter 12.32 of the Municipal Code. Additionally, the Monterey Road median may be removed as part of the possible Monterey Road narrowing to two lanes under the Project Alternate, and/or as part of a future streetscape project even if four lanes are retained. The impacted trees in the project area include indigenous oaks in the public right-of-way and rear yards of residential developments in mid-block areas. Intensification of development on properties with mature indigenous oaks could require their removal or cause substantial changes in drainage or impact to root systems that could adversely affect tree health and condition.

[49] Michelle Korpos, Project Manager, Live Oak Associates, Inc. Personal communication. June 10, 2008.

Standard Measures: In accordance with City of Morgan Hill Municipal Code, standard significant tree removal ordinance procedures and the proposed Specific Plan design guidelines, development in the project area would be subject to the following standard measures at the time of development.

SM BIO-4: Prior to site development, the applicant shall retain the services of a certified arborist to assess all trees that may be impacted by the proposed project. The arborist will conduct a tree assessment and submit a report to the City detailing all trees subject to the Chapter 12.32 Restrictions On Removal Of Significant Trees. The report will include:

- Tree species and common name.
- Size (dbh) and approximate height of tree(s).
- Current health of the tree including at a minimum: bark, foliage, structure/integrity, and roots.
- Evaluation of current health and potential impacts to future health. Recommendations for protection or removal of tree (if removal of tree is recommended, provide justification.
- Proposed mitigation and protection measures.

SM BIO-5: Native trees shall be planted to replace native trees removed unless practical reasons preclude this option, as determined by the Community Development Director. [MHMC 12.32.080(A)]

SM BIO-6: Prior to the removal of any tree or community of trees on any city or private property in the Specific Plan project area a tree removal permit would be required from the Community Development Director which would include a description of the tree replacement program and identify any additional conditions imposed by the City. Alternatively, the City's ordinance section 12.32.070(B) allows the Community Development Director to grant a tree cutting permit where utilization of the property is of greater public value than the environmental degradation caused by the action. Tree removal may also occur without a permit if the removal will take place in accordance with an approved landscape plan. [MHMC 12.32.030, 12.32.040, 12.32.060]

Impact BIO-3: The loss of many indigenous oaks in the project area due to development allowed under the proposed Specific Plan would be reduced to a less than significant level with implementation of standard measures SM BIO-4 to SM BIO-6. **(Less Than Significant Impact)**

3.10.3 Mitigation Measures

3.10.3.1 *Nesting Raptors*

The following measures shall be implemented as part of the site development permit process for development allowed under the Specific Plan to reduce impacts to tree-nesting raptors:

MM BIO-1.1: Removal of trees in the Specific Plan area could be scheduled between September and December (inclusive) to avoid the raptor nesting season and no additional surveys would be required.

MM BIO-1.2: If removal of the trees on-site would take place between January and August (inclusive), a pre-construction survey for nesting raptors shall be conducted by a qualified ornithologist to identify active nesting raptor nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys shall be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area for raptor nests. If an active raptor nest is found in or close enough to the construction area to be disturbed by these activities, the ornithologist shall, in consultation with the State of California, Department of Fish & Game (CDFG), designate a construction-free buffer zone (typically 250 feet) around the nest until the end of the nesting activity. The applicant shall submit a report indicating the result of the pre-construction survey and any designated buffer zones to the satisfaction of the Community Development Director.

3.10.4 Conclusion

Impact BIO-1:	Tree removal during the nesting season could impact protected tree-nesting raptors. Any loss of fertile bird eggs, or individual nesting birds, or any activities resulting in nest abandonment during construction, would constitute a significant impact.
Standard Measures	None
Impact After Standard Measures	Significant Impact
Mitigation Measures	MM BIO-1.1 and MM BIO 1.2
Impact After Mitigation	Less Than Significant

Impact BIO-2:	Conformance with the City's Burrowing Owl Habitat Mitigation Plan (or any adopted HCP/NCCP), including standard measures, SM BIO-1 through SM BIO-3, would ensure impacts to burrowing owls would be less than significant.
Standard Measures	SM BIO-1 to SM BIO-3
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact BIO-3:	Implementation of the standard measures, SM BIO-4 to SM BIO-6, would reduce impacts to mature, indigenous trees in the Specific Plan area to a less than significant level.
Standard Measures	SM BIO-4 to SM BIO-6
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.11 VISUAL AND AESTHETIC RESOURCES

3.11.1 Existing Setting

The Specific Plan includes the core of the downtown area as shown in Figures 2 through 5. The area is developed with a mixture of commercial, residential, industrial, and public/quasi-public uses. Undeveloped and vacant parcels are scattered throughout the downtown area, with large vacant properties located on Blocks 4, 11, 18, and the CC-R zoning district northeast of the Main Avenue and Monterey Road intersection, and south of Dunne Avenue. Properties along Monterey Road contain predominantly commercial buildings facing the street and some include parking lots on the side or behind the buildings. The buildings throughout the area are one- or two-stories tall, and are either of wood-frame, masonry, metal, or stucco construction (refer to Photos 2-4). The Morgan Hill Community Center, a modern stucco building constructed in 2002 and surrounded by landscaping and hardscape, is located at the south end of the project area at the intersection of Monterey Road and Dunne Avenue. The former Temple Emmanuel Apostolic Church, now used as a community building, completes the community-oriented built environment at the northeast corner of the Monterey Road and Dunne Avenue intersection. The area west of Monterey Road is developed with a mixture of commercial and residential uses and the area east of Monterey Road is developed with a mixture of commercial, residential, and industrial uses. Streets perpendicular to the north-south Monterey Road arterial are lined with a mosaic of single-family, wood-clad bungalows, and townhouses and apartment buildings of more recent construction (refer to Photos 5-6). Metal clad warehouse buildings are also present at the northwest corner of the East Fourth Street and Depot Street intersection (refer to Photo 2) and a lumber yard extends parallel to Depot Street between East Fifth Street and Dunne Avenue. The Union Pacific Railroad line passes through the Specific Plan area between Monterey Road and Butterfield Boulevard. A concrete batch plant is located on Main Avenue east of the UPRR tracks.

North of Main Avenue, the built environment includes a range of building types and styles. Two-story stucco clad duplexes and single-story wood and stucco clad residences are interspersed with modern commercial buildings bordered by parking lots and older industrial warehouse buildings. Britton Middle School consists of a mixture of modern and older school buildings surrounded by play fields, tennis courts, and parking lots (Photo 7). South of Dunne Avenue, the built environment includes a large aging suburban shopping center (Block 20), two-story apartment buildings, strip commercial buildings, and older single-family residences, some of which have been converted to commercial use.

Although generally urban in character, the Downtown area retains traces of the region's agricultural past. Remnants of a former granary are present next to the UPRR, with one of the former buildings renovated into an art gallery. Mature oak trees around older wood buildings reflect the former rural character of the area, along with the large lot residential area in the vicinity of Del Monte Avenue and Nob Hill. Nob Hill is a locally prominent feature at the southwestern edge of the downtown. It is an extension of the foothills of the Santa Cruz Mountains and separates the downtown area in the relatively flat Santa Clara Valley from the suburban and rural areas to the west.

West Little Llagas Creek, where it flows above ground, also provides a generally wooded transition between small lot residential and commercial uses and larger lot residential properties in the western portion of the Specific Plan project area. The creek is relatively narrow around West Third Street, widening as a corridor as it flows behind the United Methodist Church and around the southeast base of Nob Hill.

Photo 2 - View of typical two-story commercial development in the Downtown Core at the northwest corner of Monterey Road and West Second Street looking west.

Photo 3 - View of existing, underutilized warehouse development on the Sunsweet site (Block 4), looking west from the intersection of East Fourth and Depot Streets.

PHOTOS 2 AND 3

Photo 4 - View of commercial development (Votaw Building and Granada Theater) on the northeast corner of the Monterey Road and East Second Street intersection.

Photo 5 - View of bungalows typical of residential development in the project area located on the south side of West Fifth Street.

PHOTOS 4 AND 5

Photo 6 - View of apartment and single-family development on the north side of West Fifth Street looking west.

Photo 7 - View of El Toro looking west from Monterey Road with the Britton Middle School tennis courts and ball fields in the foreground (Block 19).

PHOTOS 6 AND 7

The project area does not contain designated scenic vistas and is not located near a scenic highway.

3.11.2 Visual and Aesthetic Resource Impacts

3.11.2.1 *Thresholds of Significance*

For the purposes of this EIR, a visual and aesthetic resources impact is considered significant if the project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.11.2.2 *Change in Visual Character*

The Specific Plan provides revised guidelines and development standards for mixed use residential, office, and retail buildings within a developed urban area. The Land Use Chapter of this EIR describes the increases in development intensity that would be allowed by the Specific Plan. New buildings would range from two to four stories in height (four stories would be allowed only on sites of at least 22,000 square feet) with the possibility of buildings taller than four stories on large sites under a PD/Specific Plan zoning amendment, which could possibly be proposed on key large sites such as the Caltrain parking lot (Block 16), Sunsweet site (Block 4) and/or a site on Block 3. These blocks are considered key sites in the Downtown which could have greater intensity of development to act as downtown landmarks. Buildings allowed under the Specific Plan may be taller than existing buildings in the area.

Nob Hill is generally visible in the downtown area from Monterey Road between Third and Fifth Streets and on Depot Street between Second and Fifth Streets. The current views are of a wooded hillside with the existing water tank visible from some vantage points. Where two-story development is present along these roadways the hill is shielded from view.

Another prominent hillside visible from portions of the downtown and adjacent areas is El Toro Mountain. El Toro is located west of Downtown and can be clearly seen from Monterey Road north of Main Avenue (refer to Photo 7) and from many of the roadways in the Downtown; however, views are modified by existing buildings, fences, tall trees, and other structures. El Toro, because of its height, would continue to be visible from east-west streets and other areas where there are gaps between structures. Modification of views of El Toro, a prominent local landmark and hillside, from stretches of an urbanized area of Monterey Road is not considered a substantial impact to a scenic vista.

The Specific Plan includes detailed design guidelines to ensure the development of a cohesive urban core area. The guidelines are intended to complement the existing "Main Street" commercial buildings and small town architecture seen throughout the Downtown Core. The guidelines would maintain the pedestrian scale of the area and encourage the use of appropriate building materials to complement current development in the area. Refer to the Downtown Specific Plan included as Appendix B of this Master EIR for a complete list of design guidelines and standards.

The final site design and architectural elements of buildings within the Specific Plan boundaries and adjacent area will be reviewed by the City's Community Development Director or designated staff, and/or Planning Commission and City Council upon referral or appeal, for consistency with the design guidelines and the existing and planned visual character of the Downtown area. Conformance with the recommendations and requirements of the Design Permit would ensure that future development would not detract from the visual character and quality of the Specific Plan project area. Proposed lighting would also be reviewed to ensure that new buildings would not introduce new substantial light sources that would adversely affect nighttime views or spillover onto adjacent properties. Proposed windows in buildings would also be reviewed to confirm they would not be a substantial new source of daytime glare.

For these reasons, the allowed development is not expected to substantially degrade the existing visual character of the Specific Plan project area.

Development under the Specific Plan would not significantly impact views of El Toro, a scenic vista, or scenic highway and, therefore, would not degrade views from these scenic resources.

Impact VIS-1: Implementation of the Specific Plan would not degrade the visual character of the area, degrade scenic vistas, or degrade views from a scenic highway. **(Less Than Significant Impact)**

3.11.2.3 *Light and Glare*

Development of the underutilized and vacant parcels allowed under the Specific Plan would incrementally increase light and glare in the downtown area, due to the new building surfaces, vehicles traveling to and from the development, and the lighted buildings, streets, and parking areas. These new sources of light and glare are not considered substantial and would be consistent with the light and glare currently created by buildings, street lights, and automobiles in the Specific Plan project area.

The Specific Plan design guidelines require lighting to be located and directed to light intended areas and to prevent off-site glare on adjacent buildings or properties (DG-O2). The design guidelines also prohibit the inappropriate use of mirrored and tinted glass such as in upper floor windows (DG-B2). The City's Architectural Review Board would review future development under the Specific Plan for consistency with the design guidelines including the appropriate use of lighting and avoidance of glare.

Impact VIS-2: Development under the Specific Plan would not substantially increase light or glare in the area to the extent that day and nighttime views would be significantly impacted. **(Less Than Significant Impact)**

3.11.3 Conclusion

Impact VIS-1:	Development allowed under the Specific Plan would be subject to the Specific Plan design guidelines and would not degrade the visual character of the area, adversely affect views of El Toro or scenic vistas, or degrade views from a scenic highway.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact VIS-2:	Development under the Specific Plan would not substantially increase light or glare in the area to the extent that day and nighttime views would be impacted.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.12 ENERGY

This section was prepared pursuant to CEQA Guidelines Section 15126.4(a)(1)(C) and Appendix F (Energy Conservation of the Guidelines), which require that EIRs include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

3.12.1 Introduction

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases.

Energy usage is typically quantified using the British Thermal Unit (BTU). As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 BTUs, 1,000 BTUs, and 3,400 BTUs, respectively.

Energy conservation is embodied in many federal, state and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the EnergyStar program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets forth energy standards for buildings, rebates/tax credits are provided for installation of renewable energy systems, and the *Flex Your Power* program promotes conservation in multiple areas. At the local level, the City's General Plan includes policies whose objectives include reduction in energy usage. Specifically, *Level of Service Policy 1.d* which states the City will ensure the compatibility of the transportation system to promote energy conservation; *Conservation Policy 7a* which states new development should be designed to exceed State standards for the use of energy; *Conservation Policy 7b* which state the City should promote energy conservation techniques and energy efficiency in building design, orientation and construction; and *Conservation Policy 7j* which states the City should encourage the incorporation of energy generating features, like solar panels, in new development.

In 2007, the City Council adopted an Environmental Agenda to enhance the long-term sustainability of Morgan Hill by reducing environmental impacts, increasing community health, and protecting environmental resources for future generations. The agenda identified several areas for the development of sustainability goals, including air quality, climate protection, community health, energy, green buildings, habitat conservation and enhancement, land and open space preservation, local resources and products, municipal government, pollution prevention, solid waste reduction and resource conservation, transportation, and water supply. The City has developed indicators to monitor the progress of each environmental goal on a yearly basis. On April 2, 2008, the Council accepted the 17-page indicator report for 2007. One significant indicator being measured is the community's carbon footprint to determine the community's impact on global warming (refer to Section 5.0 Cumulative Impacts).

3.12.2 Existing Setting

Total energy usage in California was 8,519 trillion BTUs in the year 2000, which equates to an average of 252 million BTUs per capita. Of California's total energy usage in 2006, the breakdown by sector was 18% residential, 19% commercial, 22% industrial, and 41% transportation. This

energy was supplied in the form of petroleum (46%), natural gas (29.5%), renewables (9%), coal (8%), nuclear electric power (5%), and hydroelectric power (2.5%).[50]

In 2005, Morgan Hill as a community used 3.8 billion MBtus of energy. Of the total energy use in Morgan Hill in 2005, the breakdown in energy use by sector was 19% residential, 14% commercial, less than 1% industrial, and 64% transportation. Based on Pacific Gas and Electric's (PG&E) energy portfolio for the local district, the percentage of energy supplied by various sources was natural gas 40%, renewable 12%, coal 1%, nuclear 19%, hydroelectric 22%, and other sources 1%.

3.12.2.1 *Electricity and Natural Gas*

Electricity and natural gas are provided to the project area by Pacific Gas & Electric Company (PG&E). The State of California currently requires that energy-saving measures be applied to new dwellings through the California Building Code. Morgan Hill requires all buildings to conform to the energy conservation requirements of California Administrative Code Title 24. In addition, the City's Environmental Agenda includes, as a primary goal, the development of a local energy system that maximizes opportunities for locally-developed clean energy generation and supports the use and development of cleaner energy generation sources nationwide. The Environmental Agenda's primary goals for green building include the use of incentives, regulations, and laws to improve the environmental performance of new and existing buildings, roads, landscapes, and facilities in the community.[51]

Electricity

Energy consumption in California grew from 250,241 gigawatt hours (GWh) in 2001 to 270,927 GWh in 2004.[52] Statewide annual peak demand is expected to grow, on average, 1.35 percent annually, to reach approximately 325,000 GWh in 2017.[53] In 2005, the City of Morgan Hill used approximately 208.5 million kilowatt hours (kWh) of electricity.[54]

California relies heavily on imported electricity from both the Southwest and the Pacific Northwest. By 2016, California utilities will need to procure approximately 24,000 MW of peak resources to replace expiring contracts, retiring power plants, and meet peak demand growth. This amount would maintain a 15 to 17 percent reserve margin.[55]

Electricity usage in California for differing land uses varies substantially by the type of uses in a building, the type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. The average annual usage of electricity is roughly 6,500 kWh per residence. The average annual usage of electricity is roughly 13 kWh per square foot for all commercial buildings and roughly 18 kWh/square foot for office buildings.

Electricity supply in California involves a complex grid of power plants and transmission lines located in the Western United States, Canada, and Mexico. The issue is complicated by market

[50] California Energy Commission. 2007 Integrated Energy Policy Report. Pages 22-23.
[51] City of Morgan Hill. City of Morgan Hill Environmental Agenda. September 19, 2007. http://www.morgan-hill.ca.gov/Upload/Document/D240004809/Adopted%20Environmental%20Agenda%20V1.0.pdf
[52] One gigawatt = one thousand megawatts = one million kilowatts = one billion watts.
[53] California Energy Commission. 2007 Integrated Energy Policy Report. Page 37.
[54] City of Morgan Hill. 2007 Environmental Baseline Indicators Report. April 2, 2008. http://www.morgan-hill.ca.gov/upload/document/d240005390/indicatorsapril2008.pdf
[55] California Energy Commission. 2005 Integrated Energy Policy Report. November 2005. Page 46.

forces that have become prominent since 1998, which is when a new regulatory environment commonly referred to as "deregulation" took effect in California. Supply is further complicated by the fact that the peak demand for electricity is significantly higher than the off-peak demand. For example, in August 2004, peak electric demand - due in large part to hot weather - reached a record high of 44,497 megawatts, which is almost double the lowest demand period.[56] The California ISO continued to deal with record electricity usage in the summer of 2006. Three new peak electricity usage records were set the week of July 17 to July 25, 2006, including a peak demand of 50,538 megawatts.[57]

In 2000-2001, electric demand exceeded supply on various occasions, which required utilities to institute systematic rotating outages to maintain the stability of the grid and to prevent widespread blackouts. Since that time, additional generating capacity has come on-line and upgrades to various transmission lines are occurring.

According to the California Energy Commission's *2007 Integrated Energy Policy Report*, population growth in California is expected to occur at a higher rate in the hotter, drier inland areas as more people move there, which will not only increase the peak demand, but also change the pattern of energy use. For example, inland areas during the summer months will require more air conditioning than coastal areas which will increase peak demand more than overall demand. Energy efficiency and demand response programs, therefore, will become even more important.[58]

Natural Gas

In 2006, natural gas was used in California to produce electricity (44 percent), in industrial uses (23 percent), in commercial uses (10 percent), in residential uses (22 percent), and for transportation (less than one percent). California imports 85 percent of its natural gas supplies from other states and Canada. California's natural gas supplies are increasingly threatened by declining production in the United States and growing demand in neighboring states.[59]

Natural gas usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all gas-consuming devices within a building. That said, the average annual usage of natural gas is roughly 45,000 cubic feet per residence. The average annual usage of natural gas is roughly 37 cubic feet/square foot for all commercial buildings and roughly 29 cubic feet per square foot for office buildings. In 2005, the City of Morgan Hill used approximately eight million therms[60] of electricity.[61]

As California strives to reduces its greenhouse gas emissions, natural gas sources and use will depend on new technologies (e.g., hybrid vehicles, solar heating) and methods of supply (e.g., liquefied natural gas shipped by tanker, biogas). These developments will depend on and influence natural gas supplies, and contribute to the uncertainty in past and future projections.[62]

[56] Source: California Independent System Operator, 8/11/04.
[57] California Independent System Operator. 26 July 2006. http://www.caiso.com/183e/183ebd4414ad0.pdf
[58] California Energy Commission. 2007 Integrated Energy Policy Report Pages 3-4.
[59] California Energy Commission. 2007 Integrated Energy Policy Report. Pages 167-168.
[60] One therm is equal to 100,000 BTUs.
[61] City of Morgan Hill. 2007 Environmental Baseline Indicator Report. April 2, 2008. http://www.morgan-hill.ca.gov/upload/document/d240005390/indicatorsapril2008.pdf
[62] California Energy Commission. 2007 Integrated Energy Policy Report. Pages 167-171.

3.12.2.2 *Gasoline for Motor Vehicles*

Californians consume roughly 16 billion gallons of gasoline and four billion gallons of diesel annually.[63] This represents a 50 percent increase over the amount that was used 20 years prior. The primary factors contributing to this increase are: 1) population growth and more on-road vehicles, 2) low per-mile cost of gasoline for the past two decades, 3) lack of alternatives to conventional gasoline and diesel fuels, 4) consumer preference for larger, less fuel-efficient vehicles, and 5) land-use planning that places jobs and housing farther apart without transportation integration.[64] Although gasoline consumption is expected to increase in California by one to two percent each year, Californians used approximately 63 million fewer gallons of gasoline in 2007 than they did in 2006.[65] Gas stations in the City of Morgan Hill sold approximately 25.9 million gallons of gasoline from July 2006 to July 2007.[66]

The average fuel economy for the fleet of light-duty vehicles (autos, pickups, vans, and SUVs) steadily increased from about 12.6 miles-per-gallon (mpg) in the mid-1970s to approximately 20.7 mpg, in 1985 as a result of federal standards which had not substantially changed in 22 years.[67] In December 2007, the Energy Independence and Security Act of 2007 was signed which mandates a national fuel economy standard of 35 miles per gallon by 2020.[68]

Although no new refineries have been constructed in California since 1969, supply has kept pace with demand through a combination of refinery upgrades/modernizations and out-of-state imports.

Imports of foreign crude oil will increase as in-state and Alaskan supplies diminish. Since California refineries are already operating close to their full capacity, daily imports of refined gasoline and diesel are expected to double over the next 20 years. Unless out-of-state facilities expand, the gasoline and diesel markets will become increasingly volatile, with the likelihood of shortages and more prolonged periods of high prices.[69]

3.12.2.3 *Applicable Morgan Hill General Plan Policies*

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating energy impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Level of Service Policy 1d* – Ensure Compatibility of Transportation System with Existing & Proposed Land Uses (SCJAP 11.02)
- *Bikeways Policy 8b* – Promote Walking as Alternate Transportation Mode (SCJAP 11.03)
- *Conservation Policy 7a* – Design New Development to Exceed State Standards Water & Energy Use
- *Conservation Policy 7b* – Promote Energy Conservation Techniques & Efficiency in Buildings

[63] California Energy Commission. 2007 Integrated Energy Policy Report. Page 189.
[64] California Energy Commission. 2005 Integrated Energy Policy Report. November 2005. Page 7.
[65] California Energy Commission. 2007 Integrated Energy Policy Report. Page 9.
[66] City of Morgan Hill. 2007 Environmental Baseline Indicator Report. April 2, 2008. http://www.morgan-hill.ca.gov/upload/document/d240005390/indicatorsapril2008.pdf
[67] California Energy Commission. 2007 Integrated Energy Policy Report. Page 200.
[68] The White House. Energy Security for the 21st Century. February 20, 2008. http://www.whitehouse.gov/infocus/energy/
[69] California Energy Commission. 2007 Integrated Energy Policy Report. Page 190.

- *Conservation Policy 7j* – Incorporate Renewable Energy Generation in New & Existing Development
- *Conservation Action 7.5* – Emphasize Energy Conservation Building Techniques for New Residential Construction (MHMC Chapter 18.78)

3.12.3 Energy Impacts

3.12.3.1 *Thresholds of Significance*

For the purposes of this EIR, an energy impact is considered significant if the project would:

- Use fuel or energy in a wasteful manner; or
- Result in a substantial increase in demand upon energy resources in relation to projected supplies.

3.12.3.2 *Energy Efficiency and Use*

The mixed-use development proposed under the Specific Plan would be constructed to meet the requirements of Title 24 of the California Administrative Code, as it pertains, to energy efficiency. Development allowed by the Specific Plan would consume energy during both the construction and operational phases of the development. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., grading), and the actual construction of proposed buildings. The operational phase would consume energy for multiple purposes including but not limited to – building heating and cooling, lighting, appliances, and electronics. Operational energy would also be consumed during each vehicle trip associated with the proposed uses. The estimated net increase in annual energy use resulting from development of the Specific Plan area at 2030 is shown in Table 3.12-1, below. The annual energy use estimates for residential units, commercial space, and office space are based on the likely projected development by 2030 identified in Table 2.1-2. The annual energy use estimates for transportation are based on the more conservative estimates of projected development by 2030 included in the Transportation Impact Analysis (Appendix C).

Table 3.12-1
Estimated Net Annual Average Energy Use (2030)

Land Use	Type of Energy	Usage/Unit	Square Footage/# of Units/Trips	Annual Energy Used
Residential	Electricity	6,500 kWh/du/year	1,192	7.75 million kWh
	Natural Gas	45,000 ft^3/ft^2/year		53.6 million ft^3
Office	Electricity	18 kWh/ft^2/year	85,591	1,215,370
	Natural Gas	29 ft^3/ft^2/year		2.48 million ft^3
Commercial	Electricity	13 kWh/ ft^2/year	93,490	1,540,638
	Natural Gas	37 ft^3/ft^2/year		3.46 million ft^3
Transportation	Gasoline	0.048 gallons/mile	17,395	1,785,896 gallons
Total	Electricity			10,506,008 kWh
	Natural Gas			59.54 million ft^3
	Gasoline			1,785,896 gallons

Notes: du= dwelling unit, ft^2= square feet, ft^3= cubic feet, kWh=kilowatt hour, Average vehicle trip length= 5.86 miles.
Annual gasoline used = (trips/day)(5.86 miles/trip)(0.048 gallons/mile)(365 days/year)
Sources: PG&E Carbon Footprint Calculator Assumptions (electricity and natural gas usage)

The proposed Specific Plan would result in a net increase in electricity, natural gas, and gasoline use in the City of Morgan Hill. Buildings constructed in the Specific Plan area would be built at minimum to Title 24 energy conservation standards and in some cases would replace existing buildings that were constructed prior to the enactment of these more stringent energy conservation standards.

The proposed Specific Plan is located in an infill area of the City that incorporates and provides connectivity to the Morgan Hill Caltrain Station. Redevelopment of the Specific Plan area with the uses envisioned would serve to reduce the number and length of vehicle trips due to the proximity of commercial services and transit options available to future residents and workers in the area.

Impact ENER-1: Projected levels of development under the proposed Specific Plan would result in a substantial increase in electricity demand; however, as urban infill, such development would be considered "smart growth" and would not use energy in a wasteful manner and therefore would result in a less than significant impact. **(Less Than Significant Impact)**

3.12.4 Avoidance Measures

3.12.4.1 *Avoidance Measures*

The following avoidance measures, should be implemented by development under the proposed Specific Plan in accordance with General Plan Conservation Policies 7a, 7b, 7j, and Conservation Action 7.5. Although not required to mitigate the impacts of development in the Specific Plan project area, the City should consider adopting, as feasible, the following avoidance measures as conditions of approval.

Program Measures

AM ENER-1.1: In accordance with the provisions of Morgan Hill Municipal Code Chapter 18.78.28, development should be required to meet a minimum point standard for energy conservation (i.e. *GreenPoint Rated*, *LEED*). Development proposed under the Specific Plan should provide for energy conservation through the use of energy-efficient building techniques, materials, and appliances, such that the buildings consume less energy than allowed by California's Title 24 Building Energy Efficiency Standards, which could be documented in the energy compliance reports submitted at the time of application for building permits.

Measures to Reduce Energy Consumption During Demolition

AM ENER-1.2: Development and demolition activities proposed under the Specific Plan should have a waste management plan for recycling of construction and demolition materials in place and operating from project inception. Prior to the issuance of building permits, the City will review the plan. The plan would be completed to the satisfaction of the Community Development Director, Building Official, or Environmental Coordinator.

AM ENER-1.3: Development proposed under the Specific Plan should recycle or salvage a minimum of 50 percent (by weight) of construction, demolition, and land

clearing waste. The projected quantities of waste generated during demolition and construction, how much of those materials would be reused, recycled, or otherwise diverted from landfills, and where unrecycled materials would be disposed of should be included in the waste management plan prepared for proposed development. Upon completion, the project applicant would provide the City with a report summarizing the waste type, quantity, disposition (e.g., recycled or landfilled) and facility used, to document execution of the plan.

Measures to Reduce Energy Consumption by Design

AM ENER-1.4: Development proposed under the Specific Plan should, to the extent feasible, incorporate principles of passive solar design to the satisfaction of the Community Development Director. Passive solar design is the technology of heating, cooling, and lighting a building naturally with sunlight rather than with mechanical systems because the building itself is the system. Basic design principles include large south-facing windows with proper overhangs, as well as tile, brick, or other thermal mass material used in flooring or walls to store the sun's heat during the day and release it back into the building at night or when the temperature drops. Passive solar also takes advantage of energy efficient materials, improved insulation, airtight construction, natural landscaping, and proper building orientation to take advantage of the sun, shade, and wind. Prior to issuance of building permits, the approved plans should demonstrate how and where these principles are incorporated to the satisfaction of the Community Development Director.

Measures to Reduce Energy Consumption During Construction

AM ENER-1.5: The idling of construction vehicles shall be avoided to reduce fuel consumption, emissions, and noise.

AM ENER-1.6: Development proposed under the Specific Plan should, to the extent feasible, incorporate standards for cool roofs outlined in Build It Green's (BIG) Greenpoint rating system for residential development and the LEED rating system for commercial development.

AM ENER-1.7: Development proposed under the Specific Plan should be constructed to meet the requirements of the U.S. Green Building Council's Leadership in Energy and Design (LEED) for new commercial development and Build It Green's (BIG) Greenpoint rating system for new residential development. In particular, the development should meet the minimum points required in the energy category of both checklists.

AM ENER-1.8: Development proposed under the Specific Plan should, to the extent feasible, include photovoltaic (i.e., solar electric) systems on rooftops. An average-sized residential system (2.5 kW) in California produces in excess of 4,000 kWh annually, which equates to 62% of the average electricity demand per residential unit. Commercial systems are generally larger than residential systems and produce commensurately more electricity. (Each square foot of

photovoltaic cells produces approximately 10 watts of power in bright sunlight.)

AM ENER-1.9: Development proposed under the Specific Plan should incorporate solar hot water heating systems, to the extent feasible, to reduce energy use.

3.12.5 Conclusion

Impact ENER-1: Projected levels of development under the proposed Specific Plan would result in a substantial increase in electricity demand; however, as urban infill, such development would be considered "smart growth" and would not use energy in a wasteful manner and therefore would result in a less than significant impact.	
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Avoidance Measures	AM ENER-1.1 to AM ENER-1.9
Impact After Avoidance Measures	Less Than Significant

3.13 PUBLIC FACILITIES AND SERVICES

3.13.1 Introduction

Public facilities and services, such as fire and police, parks, libraries, and schools, are provided to the community as a whole at defined locations and the resource base for delivery of these services is financed on a community-wide basis. In Morgan Hill, these services are provided by the City and County of Santa Clara.

New development usually creates an incremental increase in the demand for these services with the amount of demand varying widely between development types (e.g., residential versus commercial), the type of services, and the specific characteristics of the development (such as student generation by multiple family residences versus senior housing).

The impact of a particular project on public facility services is often a fiscal impact. Projects can cause an increase in the cost of providing service (for example more personnel hours for police patrols or park maintenance). These are fiscal impacts, not environmental impacts. An analysis of fiscal impacts is not required under CEQA.

CEQA analysis is required if the increased demand on public facilities and services is of sufficient size to trigger the need for a new facility (such as a school or fire station) since construction of the new facility would have a physical impact on the environment. CEQA requires that an EIR then identify and evaluate the physical impacts on the environment that such a facility would have.

3.13.2 Existing Setting

3.13.2.1 *Fire Service*

The City of Morgan Hill contracts for fire and emergency medical services with the Santa Clara County Fire Department. The City is served by the following two County fire stations: 1) El Toro Fire Station, located at 18300 Old Monterey Road (approximately 1.2 miles northwest of the Specific Plan area), and 2) Dunne Hill Fire Station, located at 2100 East Dunne Avenue (approximately 2.2 miles east of the Specific Plan area). It is the Fire Department's goal for a total response time to calls of seven minutes.[70] The City is also served under a mutual aid agreement by the California Department of Forestry and Fire Protection (CDF). The CDF Station is located at 15670 South Monterey Road (approximately 1.3 miles south of the Specific Plan area).

The Fire and Medical Services Master Plan Update prepared in 2002 identified the need for a station in the area of Dunne Avenue and Butterfield Boulevard to enhance fire service response times. A new fire station is planned north of the Santa Clara County Courthouse along Butterfield Boulevard; however, its construction is dependent on operational funding to staff the station becoming available. There are existing funds set aside to construction the fire station and provide equipment. The City is currently exploring possible funding sources for on-going funding for staffing and operating the station. The City Council placed a two percent utility tax on the November 2008 ballot (Measure G) which would have increased general fund revenue available for public safety; however, this measure was defeated.

[70] City of Morgan Hill. Fire and Emergency Medical Services Master Plan Update. 2002. http://www.morgan-hill.ca.gov/Upload/Document/D240005203/2002%20Fire%20&%20EMS%20Svcs%20Master%20Plan%20Study%20Part%201.pdf

3.13.2.2 *Police Service*

Police service is provided to the site by the City of Morgan Hill Police Department. The headquarters of the Morgan Hill Police Department is located at 16200 Vineyard Boulevard. The department currently employs 38 sworn officer positions 23.5 non-sworn support positions. The Police Department's goal is to respond to Priority One calls within five minutes and Priority Two calls within 10 minutes. In 2007, the Morgan Hill Police Department responded to 37,675 calls for service, which equates to one call per hour per 12-hour shift.[71]

3.13.2.3 *Schools*

The project site is located within the Morgan Hill Unified School District. The district is comprised of 14 schools: eight elementary schools, two middle schools, two high schools, a continuation high school, and a community adult school as well as a home schooling program. Residential development proposed under the Specific Plan would be served by six schools in the district. El Toro Elementary School is located approximately 0.4 miles east of the project area at 455 East Main Avenue and P.A. Walsh Elementary School is located approximately 0.4 miles west of the project area at 353 West Main Avenue. Barrett Elementary School formerly served a portion of the project area but was closed following the end of the 2008-2009 school year. Lewis H. Britton Middle School is located within the project area (Block 19) and approximately 0.2 miles north of the Specific Plan boundary at 80 West Central Avenue. Martin Murphy Middle School is located approximately nine miles north of the project area at 141 Avenida Espana in San José. Live Oak High School is located approximately 1.6 miles east of the project area at 1505 East Main Avenue. Ann Sobrato High School is located approximately 2.1 miles north of the project area at 401 Burnett Avenue. The 2008-2009 school year attendance boundaries for each of these schools are shown graphically on Figure 22.

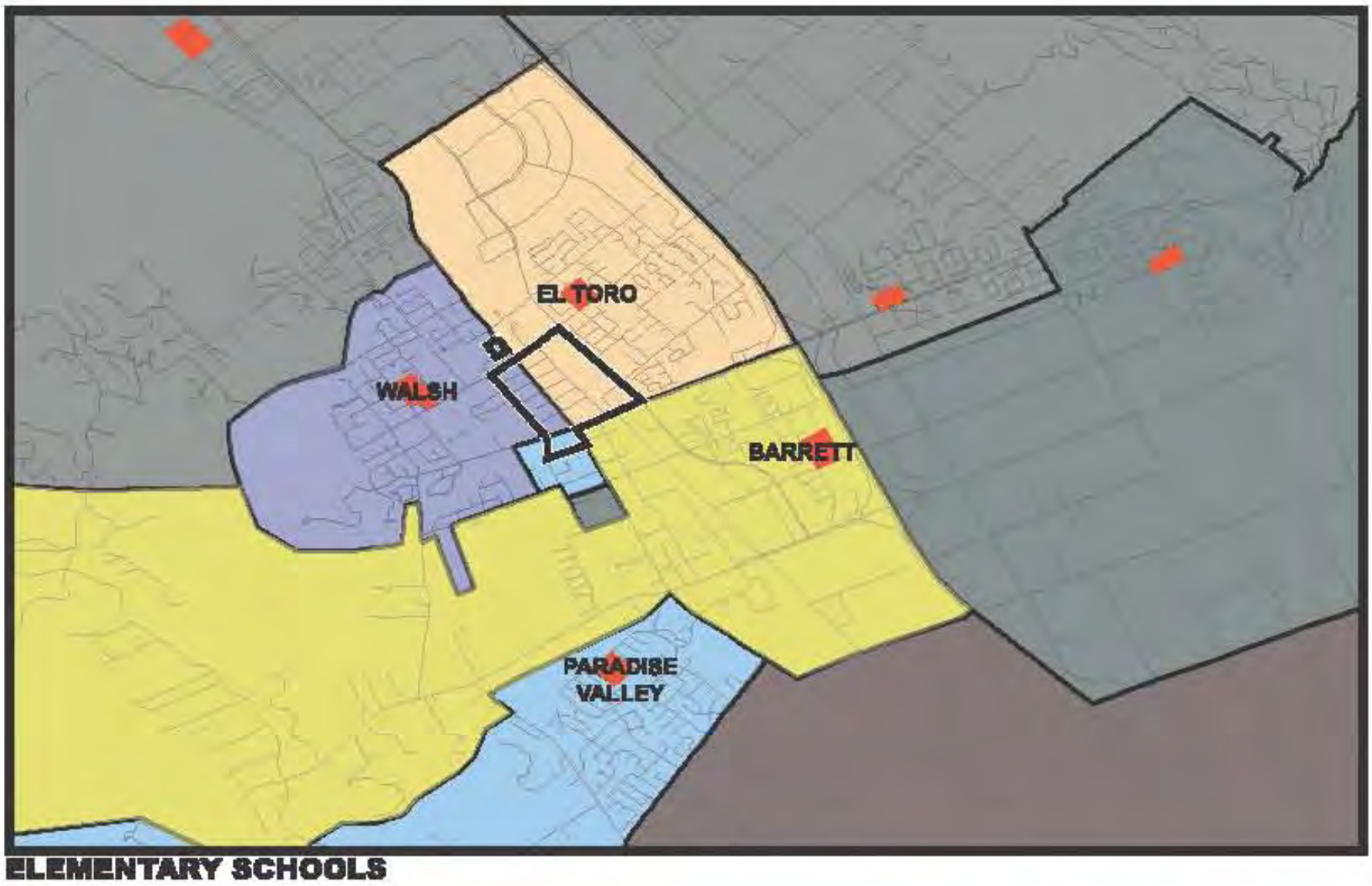
There are a number of private elementary, middle, and high school facilities also located within Morgan Hill; however, enrollment and capacity of those schools is not reflected in this analysis.

3.13.2.4 *Parks and Recreational Facilities*

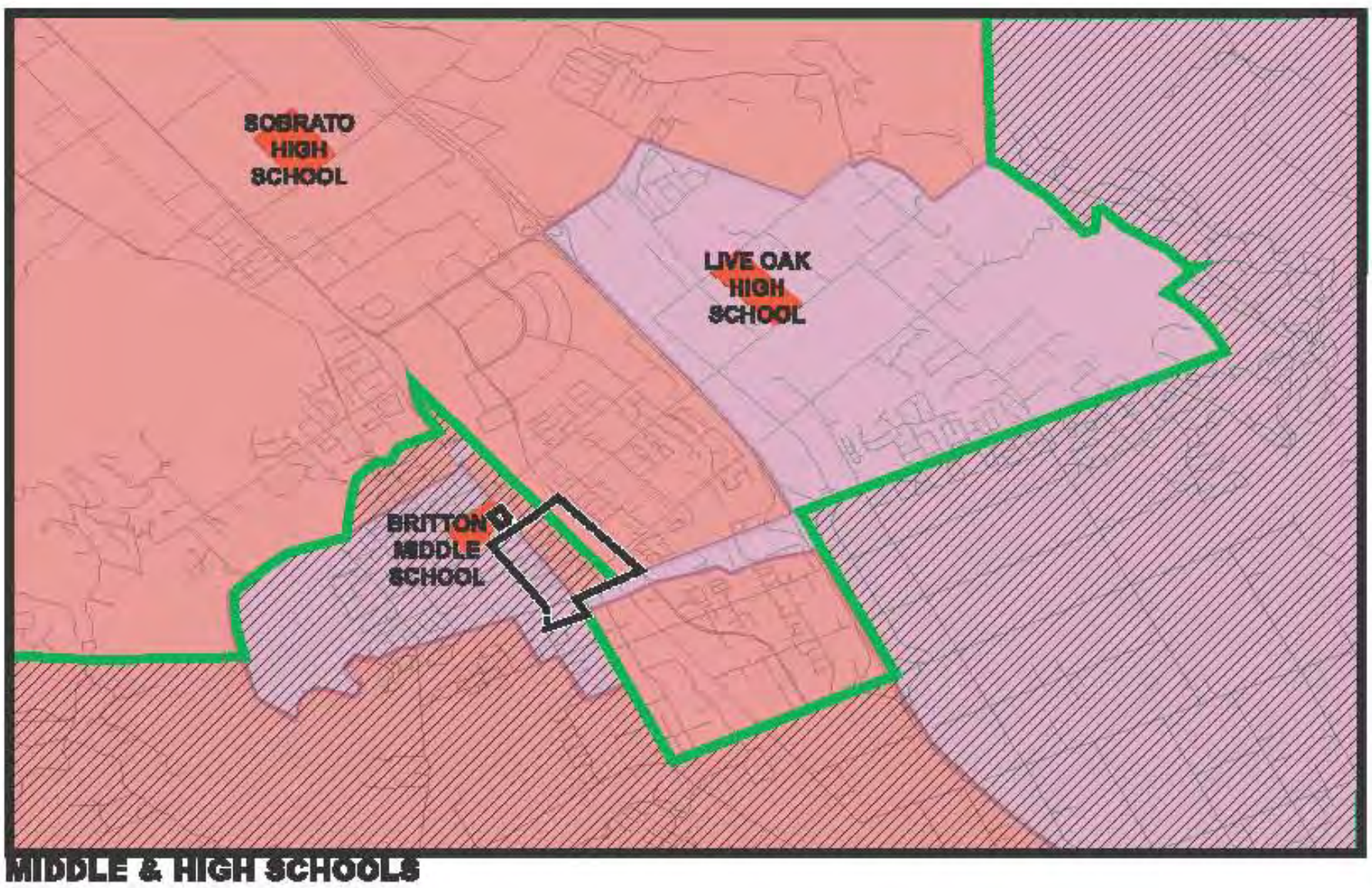
The City of Morgan Hill currently owns approximately 150 acres of public parkland, including two community parks, two neighborhood parks, two neighborhood/school parks, and 14 mini-parks. Parks near the downtown area include Belle Estates Park (approximately 1,105 feet to the east), Diana Park (approximately 1,370 feet to the east), Stone Creek Park (approximately 1,315 feet to the east), and Galvan Park (approximately 950 feet to the west).

In addition to parks, the City owns special use facilities for recreational purposes. These facilities include the Morgan Hill Aquatics Center, Centennial Recreation Center, Community and Cultural Center, and the Outdoor Sports Center. The Community and Cultural Center, located at 17000 Monterey Road, is within the boundaries of the Downtown Specific Plan and occupies most of a square block between Dunne Avenue and East Fifth Street. The Community Center provides various rooms for events, meetings, classes; a children's pavilion, and an outdoor amphitheater. School facilities are also available for use after school hours and on weekends. These facilities include 12 baseball/softball fields, nine soccer fields, two football fields, two tracks, and four swimming pools. School facilities located near the Downtown area include those of Lewis H. Britton Middle School and El Toro Elementary School.

[71] City of Morgan Hill. City Connection Morgan Hill News. May 2008.



ELEMENTARY SCHOOLS



MIDDLE & HIGH SCHOOLS

KEY

- Specific Plan Area
- School Location

School Attendance Boundary

- Paradise Valley Elementary School
- Barrett Elementary School (Closed 2009-2010 School Year)
- Walsh Elementary School
- El Toro Elementary School
- Murphy Middle School (Off Map)
- Britton Middle School
- Sobrato High School
- Live Oak High School
- Other MHUSD Schools

SCHOOL ATTENDANCE BOUNDARIES (2008-2009 SCHOOL YEAR) FIGURE 22

Morgan Hill residents also utilize county and state parks. These parks include Silveira Park at the southern end of the City, the Coyote Creek park chain to the north, and Henry Coe State Park to the east.

The City is also in the process of developing a Trails Master Plan. The Master Plan is intended to provide long-term direction for guiding future trail development given the projected continued growth of Morgan Hill and the region. The Master Plan is intended to be a flexible, comprehensive, and long-range planning document for the acquisition of properties for a future citywide trails system. It is also intended to build upon the Morgan Hill Bicycle Plan by identifying additional linkages, pathways, and commute routes for both pedestrian and bicyclists, while acknowledging the surrounding natural environment. The Master Plan proposes open space trails for the undeveloped hillsides in and around Morgan Hill, providing access to open grassy ridges with panoramic views. These open space trails will also provide access from Morgan Hill to nearby parks and existing trails, such as the Coyote Creek County Park. There are existing sidewalk trail connections identified in the Specific Plan project area on the west side of Butterfield Boulevard, both sides of Main Avenue, both sides of Monterey Road, both sides of Dunne Avenue, on Del Monte Avenue from Main Avenue to Second Street , and on Second Street from Del Monte Avenue to Monterey Road. Sidewalk trail connections are proposed on Ciolino Avenue from Monterey Road to the proposed paved trail along West Little Llagas Creek that stretches from Del Monte Avenue to Ciolino Avenue in the Specific Plan project area.

The City's General Plan has a parks and recreation goal to provide useful, accessible and high-quality park, recreation and trail facilities and programs. Morgan Hill's General Plan goal for parkland is five acres per 1,000 residents; however, in accordance with State laws regarding the level of impact fees and maximum requirements for subdivisions, the Municipal Code requires three acres of parkland per 1,000 residents. Efforts to achieve greater than 3.0 acres per 1,000 residents are made through other means such as voluntary commitments, state grants, school parks, etc. Morgan Hill's current population is 39,218 and is projected to grow to 48,000 by the year 2020.[72] Based on the current Draft Capital Improvements Program (CIP), the City will purchase 40 acres of parkland in summer 2009 and the City will own a total of approximately 213 acres of parkland by the end of 2011 to serve an estimated population of 41,391.[73] This exceeds the City's goal of five acres of parkland per 1,000 capita.

3.13.2.5 *Applicable Morgan Hill General Plan Policies*

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating public facilities and services impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Public Safety Policy 17b* – Promote Police & Fire Security Considerations in All Structures
- *Public Safety Action 17.6* – Implement Fire Safety Requirements Through Development Review Committee

[72] State of California, Department of Finance. E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2008, with 2000 Benchmark. Sacramento, California, May 2008. http://www.dof.ca.gov/research/demographic/reports/estimates/e-5_2001-06/documents/E-5_2008%20Internet%20Version.xls Accessed: June 13, 2008.

[73] City of Morgan Hill, Projection of Developed Parkland per 1,000 Population, Based on Draft 09/10 - 11/12 CIP, June 17, 2009.

- *Parks and Recreation Policy 18i* – Incorporate Emergency Services into Design Review for Recreation Facilities
- *Environmental Hazards Policy 2b* – Minimize Development in Fire Hazard Areas (SCJAP 15.04)
- *Coordinated Urban and School Development Policy 19a* – Coordinate School Facility Planning with MHUSD
- *Coordinated Urban and School Development Policy 19b* – Develop Strategic Plan to Construct Schools
- *Coordinated Urban and School Development Policy 19e* – Provide Adequate & Safe School Facilities
- *Coordinated Urban and School Development Policy 19g* – To Minimize Busing Needs Encourage Infill Development (SCJAP 4.05)
- *Coordinated Urban and School Development Policy 19h* – Control Growth to Allow School Planning (SCJAP 4.02)
- *Coordinated Urban and School Development Action 19.3* – Coordinate Development with Capital Funds for Schools (SCJAP 4.03)
- *Coordinated Urban and School Development Action 19.4* – Condition Development Approvals on School Availability (SCJAP 4.04)
- *Coordinated Urban and School Development Action 19.9* – Develop Additional funding Methods for School Facilities (SCJAP 4.11)
- *Coordinated Urban and School Development Action 19.12* – Collect Development Impact Fees (SCJAP 4.14)
- *Coordinated Urban and School Development Action 19.13* – Insure Development Impact Fees Commensurate with Cost of Public Improvements (SCJAP 4.15)
- *Parks and Recreation Policy 18a* – Recreational Facilities & Programs Shall Meet Community Needs
- *Parks and Recreation Policy 18b* – Site Parks and Recreational Facilities to Maximize Access
- *Parks and Recreation Policy 18c* – City Shall Acquire & Develop Parks & Recreation Facilities
- *Parks and Recreation Policy 18d* – Coordinate Location & Development of Parks with Open Space and Conservation Element
- *Parks and Recreation Policy 18p* – Discourage Development of Mini-parks
- *Parks and Recreation Policy 18q* – Require Park Acquisition & Development Fees
- *Parks and Recreation Action 18.1* – Actively Pursue Acquisition of Parkland
- *Parks and Recreation Action 18.2* – Partner with Other Agencies to Acquire & Develop Parks & Recreation Facilities
- *Parks and Recreation Action 18.5* - Work with SCVWD to Establish Easements & Develop Trails & Linear Parks

3.13.3 Public Facilities and Services Impacts

3.13.3.1 *Thresholds of Significance*

For the purposes of this EIR, a public services and facilities impact is considered significant if the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:

- Fire Protection,
- Police Protection,
- Schools,
- Parks.

3.13.3.2 *Fire Service*

The proposed Specific Plan would allow for increased development on currently developed sites and some undeveloped sites within the urbanized area of the Downtown currently served by the Santa Clara County Fire Department (SCCFD). The mixed-use and residential development proposed under the Specific Plan would not substantially increase demand for fire services but could result in an incremental increase in demand for emergency medical services.

Development proposed under the Specific Plan would be built in conformance with current codes, including requirements for the installation of fire sprinklers, which would reduce fire hazards. While adherence to codes would minimize the potential damage and risk from fire and other hazards, the existing laws represent minimum standards and do not safeguard against all hazards. The increased amount of development in the Specific Plan area is likely to increase the demand for fire services by an incremental amount. The increased demand is not anticipated to result in the need for any new fire facilities beyond those currently planned, as the service area for each fire station would not change and the Downtown is already substantially developed.

A fire station was identified as necessary in the vicinity of Dunne Avenue and Butterfield Boulevard as part of the Fire and Medical Services Master Plan Update (2002). Funding for the building and equipment is already available; the fire station will be constructed on Block 17 as operational funding becomes available to staff the new station. The facility will serve the local area including the Specific Plan project area. The station is proposed to increase response times and provide a greater number of responders to an emergency.

The SCCFD currently operates a 75-foot ladder truck in Morgan Hill that could serve structures up to 55 feet as allowed under the Specific Plan. Deployment of the ladder requires clear widths of 26 feet to access structures up to 55 feet in height as proposed under the Specific Plan. Buildings that could be proposed up to 90 feet would require interior fire fighting and rescue operations and would not result in the need for additional ladder truck equipment.

As described in *Section 2.0. Description of the Proposed Project*, the Specific Plan proposes completing several modifications to roadways and pathways in the downtown area. These modifications include the Project Alternate that would reduce the number of travel lanes on Monterey Road through downtown from two lanes to one lane in each direction and/or applying traffic calming measures. The Specific Plan Project Alternate also proposes to amend the General Plan to maintain Depot Street as an alternate north/south route through Downtown. Butterfield Boulevard would also provide a north/south route in the project area and Del Monte would provide partial access to the project area west of Monterey Road. The traffic calming measures proposed by the Specific Plan are not anticipated to impede access or affect Fire Department response times in the Downtown area, as long as the design allows for the minimum 20-foot clear travel path and reflects other design parameters needed by fire service providers.

Standard Measures: In accordance with City of Morgan Hill standard conditions, development in the Specific Plan project area shall implement the following measures:

SM PS-1: Development and roadway modifications proposed under the Specific Plan will be subject to SCCFD review to ensure building compliance with the Uniform Fire Code and roadway widths/configurations allow for fire truck access to buildings and adequate response times to the project area.

Impact PS-1: Implementation of SM PS-1 will ensure the proposed Specific Plan development and potential roadway modifications would not result in the need for the construction of additional fire service facilities or equipment other than those currently planned. **(Less Than Significant Impact)**

3.13.3.3 *Police Service*

The proposed Specific Plan would allow for increased development in areas of the City currently served by the Morgan Hill Police Department. The design of development allowed under the Specific Plan will also be reviewed to ensure that it incorporates appropriate safety measures to minimize criminal activity. Given the infill location of the Specific Plan area, and the existing provision of police services to the area, the proposed Specific Plan would not result in the need for additional police facilities. New development in Morgan Hill is required to pay an impact fee for police facilities; these fees go toward paying debt service and ensuring equipment such as police cares are available to serve new development.

Impact PS-2: The proposed Specific Plan may incrementally increase calls for police service but would not result in the need for the construction of additional police facilities. **(Less Than Significant Impact)**

3.13.3.4 *Schools*

Residential development proposed under the Specific Plan would be served by six schools within the Morgan Hill Unified School District. The schools serving the Specific Plan area and their existing capacity are shown in Table 3.13-1. The students generated from likely projected residential development under the Specific Plan by 2030 (refer to Table 2.1-2) would exceed the capacity of Walsh Elementary, El Toro Elementary and Ann Sobrato High School assuming the current school attendance boundaries remain the same and additional capacity is not available.

Table 3.13-1
School Capacity and Student Generation

School	Existing Capacity	Existing Enrollment	Available Capacity	Specific Plan Student Generation*
Walsh Elementary	700	687	13	**98**
El Toro Elementary	600	584	16	**363**
Elementary Schools Subtotal	1,300	1,271	29	461
Britton Middle	840	736	104	60
Murphy Middle	990	680	220	49
Live Oak High	1,500	1,288	212	44
Sobrato High	1,560	1,561	-1	**179**

Notes: Schools where student generation from the Specific Plan exceeds available capacity for current school attendance boundaries are shown in **bold** text.
Sources: Morgan Hill Unified School District. School Facilities Needs Analysis. August 10, 2007.
Bonnie Tognazzini, Deputy Superintendent, Morgan Hill Unified School District.

Portable classrooms have been identified as one method that could be used by the school district to increase the capacity of the schools that would be attended by residents of the Specific Plan project area.[74] Placement of portable classrooms on existing school district properties would not result in significant environmental impacts. Alternatively, boundaries of the enrollment areas for each school could be adjusted to utilize the capacities at other schools that also serve portions of the Specific Plan project area, given that there is available capacity for projected students within the District's schools.

Development allowed under the Specific Plan on Block 19 would replace approximately 2.1 acres of school facilities, including tennis courts and a ball field, with a mixed-use office and residential development. Redevelopment of Block 19 would remove one baseball diamond and the school's tennis courts; however, this school site includes substantial field areas on the southern and western portion of the property and it is not anticipated that redevelopment of this portion of the site would result in substantial impacts to school operations. In order for Block 19 to be redeveloped the Morgan Hill Unified School District would need to sell the property or enter into an agreement with a developer.

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to avoid impacts to the Morgan Hill Unified School District.

SM PS-2: State Law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities is payment of a school impact fee prior to issuance of a building permit. The school impact fees implementation of measures specified in Government Code 65996 would be used to offset project-related increases in student enrollment. Residential development proposed under the Specific Plan would be required to comply with the school impact fee requirements of the Morgan Hill Unified School District.

[74] Anessa Pasillas, Supervisor of Maintenance, Morgan Hill Unified School District. Personal communication. May 15, 2008.

SM PS-3: The City of Morgan Hill shall continue to provide RDCS Residential Development Quarterly Reports to the Morgan Hill Unified School District, so that the District is aware of the pace and nature of residential development and can estimate student generation and take appropriate measures to accommodate students generated by new development, including students from the Specific Plan project area.

Impact PS-3: Implementation of standard measures, SM PS-2 and SM PS-3, would offset impacts to the Morgan Hill Unified School District facilities from residential development in the Specific Plan project area. Based on the availability of currently closed facilities, it is not anticipated that the construction of a new school or substantial new facilities would be required to serve new residents of the Specific Plan project area. **(Less Than Significant Impact)**

3.13.3.5 *Parks*

The proposed residential development would increase the use of park facilities in the Specific Plan project area. The Specific Plan includes the development of a 0.4-acre passive park on City property, on the north side of Third Street. This park will also be used for the Upper Llagas Creek Flood Control project (refer to Figure 10). The passive park would be located within one-half mile of all the blocks in the Specific Plan project area.

The City's General Plan has a parks and recreation goal to provide useful, accessible and high-quality park, recreation and trail facilities and programs. Morgan Hill's goal for parkland is five acres per 1,000 residents; however, the Municipal Code requires three acres of parkland per 1,000 residents in accordance with State law governing maximum requirements on development.

Projected likely residential development in the Specific Plan area by 2030 is assumed to result in 1,192 additional units. Based on the Municipal Code Chapter 17.28, properties zoned R-2 and above are assumed to generate 2.94 persons per dwelling unit, which exceeds the population assumptions in the Specific Plan, and would result in an increase in population in the Specific Plan area of 3,504. Based upon the City's Municipal Code, implementation of the Specific Plan, therefore, could result in the need for approximately 10.5 additional acres of parkland in the City of Morgan Hill, based on projected population growth.

Redevelopment of Block 19 with a mixed-use office and residential development would remove approximately 2.1 acres of school recreational facilities including tennis courts and a ball field. Playing fields and tennis courts are not assumed in the City's analysis of existing parklands and redevelopment of Block 19 would not result impact the City's attainment of its parkland goal (with the exception of the increased population for which additional parkland or in-lieu fees would be provided by the developer of the 2.1-acre property).

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measure to avoid impacts to park and recreational facilities:

SM PS-4: The City of Morgan Hill has adopted a parkland dedication/park land in-lieu fee ordinance (Municipal Code Chapter 17.28) that requires parkland dedication or in-lieu fees for residential developments. This ordinance requires residential developers to dedicate public parkland or pay in-lieu fees,

or both, to offset the demand for neighborhood parkland created by their housing developments. The acreage of parkland or amount of the in-lieu fee required is based upon criteria outlined in Chapter 17.28 of the City's Municipal Code.

Impact PS-4: Implementation of standard measure, SM PS-3, would ensure development under the Specific Plan would provide adequate park and recreational facilities to service residents of the Downtown area either in the form of new parks or through the payment of in-lieu fees. **(Less Than Significant Impact)**

3.13.4 Conclusion

Impact PS-1:	Implementation of SM PS-1 will ensure the proposed Specific Plan development and potential roadway modifications would not result in the need for the construction of additional fire service facilities or equipment other than those currently planned.
Standard Measures	SM PS-1
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact PS-2:	The proposed Specific Plan may incrementally increase calls for police service but would not result in the need for the construction of additional police facilities.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact PS-3:	Implementation of standard measures, SM PS-2 and SM PS-3, would offset impacts to the Morgan Hill Unified School District facilities from residential development in the Specific Plan project area. It is not anticipated that the construction of a new school or substantial new facilities would be required to serve new residents of the Specific Plan project area.
Standard Measures	SM PS-2 and SM PS-3
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact PS-4:	Implementation of standard measure, SM PS-4, would ensure development under the Specific Plan would provide adequate park and recreational facilities to service residents of the Downtown area either in the form of new parks or through the payment of in-lieu fees.
Standard Measures	SM PS-4
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

3.14 POPULATION, JOBS, AND HOUSING

3.14.1 Existing Setting

According to California Department of Finance estimates, Morgan Hill's population for 2009 was 39,301 with 3.103 persons per households.[75] The Association of Bay Area Governments (ABAG) projects the population for Morgan Hill to be 51,700 in 2030.[76]

As part of the General Plan, residential development within the City of Morgan Hill is controlled by the Residential Development Control System (RDCS). By approving Measure C in 2004 and Measure F in 2006, Morgan Hill voters extended the City's RDCS to 2020. RDCS establishes a population ceiling for the City of 48,000 as of January 1, 2020. Additional population from three existing County subdivisions assumed to annex into Morgan Hill is also allowed by the RDCS and, therefore, the 2020 population is projected to be 49,000 based on projected completion of those annexations.

Morgan Hill currently has a significant portion of its workforce traveling outside the City for employment. Increasing jobs in the City would help to alleviate peak hour traffic by eliminating the need for workers to commute from Morgan Hill to employment centers in northern Santa Clara County.

The City's General Plan policies include maintaining a jobs and housing balance (*Jobs and Housing Policy 2d*). In 2005, the City had approximately 16,860 employed residents and 14,040 jobs or 0.83 jobs per employed resident. The City also had approximately 12,821 housing units or approximately 1.087 jobs per housing unit.

3.14.1.1 *Applicable Morgan Hill General Plan Policies*

Various policies in the City's General Plan have been adopted for the purpose of avoiding or mitigating population, jobs, and housing impacts resulting from planned development within the City. All future development addressed by this EIR would be subject to the development policies and actions listed in the City's General Plan, including the following:

- *Jobs and Housing Policy 2c* – Balance Job & Housing Supplies (SCJAP 3.00)
- *Jobs and Housing Policy 2d* – Attain/Maintain a Balance of Jobs & Housing Through Land Use Controls (SCJAP 3.01)

[75] State of California, Department of Finance. E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark. Sacramento, California, May 2009. http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2009/documents/2009%20E-5a%20Internet%20Version.xls Accessed: July 16, 2009

[76] Association of Bay Area Governments. Projections 2007: Forecasts for the San Francisco Bay Area to the Year 2030. December 2006.

3.14.2 Population, Jobs, and Housing Impacts

3.14.2.1 *Thresholds of Significance*

For the purposes of this EIR, a population, jobs, and housing impact is considered significant if the project would:

- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); or
- Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere; or
- Result in a substantial conflict with the City's policies regarding an overall jobs/housing balance.

3.14.2.2 *Population and Housing*

Implementation of the proposed Specific Plan would allow for an intensification of residential uses within the Specific Plan project area, with a projected likely development increase of up to 850 residential units by 2015 and 1,192 residential units by 2030. As previously discussed, the rate of residential growth is controlled by the City's Residential Development Control System that limits new residences in the City to approximately 250 units per year. Morgan Hill voters approved a ballot measure to exempt 500 residential units by 2020 within the Specific Plan project area from the City's Residential Development Control System. Also, the Council could be aggressive with downtown set asides under the existing RDCS ordinance to accommodate the desired level of development. These 500 additional residential units would not result in an increase in population in the City since the 48,000 population cap by 2020 would remain in place. The number of allocations for units outside the Specific Plan project area could commensurately decrease due to this proposed exemption. The proposed growth would take place on infill parcels located near transit in a developed urban area.

Redevelopment proposed by property owners and allowed under the Specific Plan could result in the removal of some existing residences. This could occur at various locations within the proposed CBD, R3, and CC-R zoning districts. For example, development allowed on Block 20 could result in the removal of eight apartment units from the site. Displacement on this scale generally would not be considered substantial given the relatively small number of housing units and persons affected.

The City of Morgan Hill has recognized that redevelopment of existing housing sites can cause hardship to residents. As described below, the City has applied measures as standard conditions of approval where residents will be displaced.

Standard Measures: In accordance with the City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to reduce and/or avoid impacts to people and housing:

SM PH-1: Relocation assistance in the form of a list of available rental units of similar price and in the same general area shall be provided each tenant, together with a relocation allowance equal to three (3) months rent at the tenant's rate in effect at the time final approval is granted. The rental list shall be updated weekly by the applicant until residences are vacated. A copy of all assistance plans shall be forwarded to the Housing Division for approval. Payment shall be made when relocation expenses are incurred or no later than the time the

tenant vacates the premises. (Morgan Hill Municipal Code Chapter 15.30.050)

SM PH-2: Project's located in the Downtown must comply with the provisions of the Downtown Replacement Housing Program (DRHP). Those provisions may require that relocation assistance and/or on-site replacement housing be provided to current or past residents of the property. The applicable provisions of the DRHP must be completed to the satisfaction of the Community Development Director prior to issuance of building permits for the subject project. (Morgan Hill Municipal Code Chapter 15.30.050 and 15.30.060)

Impact PH-1: Development proposed under the Specific Plan would not result in impacts related to population growth and implementation of standard measures, SM PH-1 and SM PH-2, would ensure that substantial numbers of housing units or people are not displaced without the provision of replacement housing assistance. **(Less Than Significant Impact)**

3.14.2.3 *Jobs and Employed Residents*

The proposed Specific Plan would allow for increased office and commercial development as well as residential development within the project area. The existing jobs per employed resident ratio is approximately 0.738.[77] According to Morgan Hill projections and *ABAG Projections 2007*, the City is projected to have 27,050 employed residents and 24,560 jobs by 2030 or 0.908 jobs per employed resident. The Specific Plan project area has long been planned for mixed use development. Redevelopment allowed under the Specific Plan would intensify development on underutilized parcels and develop vacant parcels in the project area with job-creating uses and housing. The Specific Plan project likely development by 2030 is approximately 1,192 additional residential units in the project area. Based on Morgan Hill projections, Morgan Hill will have 1.323 jobs per household by 2030. Based on this 1.323 factor and the number of additional residential units projected in the Specific Plan project area, the project would result in an additional 1,577 employees in the City. The project would also increase employment opportunities in the Specific Plan project area through the likely projected development of a net increase of 93,490 square feet of retail space and 85,591 square feet of office space. Based on Morgan Hill projections employment assumptions of two employees per 1,000 square feet of retail space and three employees per 1,000 square feet of office space, the proposed project would result in approximately 444 additional jobs in the Specific Plan project area.[78] The proposed project would therefore offset some, but not all, of the increased employment needs of project area residents.

The proposed project would allow increased employment opportunities in the City of Morgan Hill in conjunction with the construction of additional residential units in the City. Although the project would not provide employment for all of the future residents of the project area, it would provide more jobs per resident than the suburban residential subdivisions that are found throughout Morgan Hill and other South Bay Area communities. The proposed project, therefore, would not substantially conflict with the City's policy of balancing jobs and housing in the City. A balance of jobs and housing units in the City is not intended to occur on a site by site basis.

[77] Association of Bay Area Governments. Projections 2007: Forecasts for the San Francisco Bay Area to the Year 2030. December 2006.

[78] City of Morgan Hill. Morgan Hill Growth Projections and Documentation of Methods to Develop Land Use Data Used in Morgan Hill Traffic Demand Model. May 14, 2009.

Impact PH-2: Development proposed under the Specific Plan would provide employment opportunities in conjunction with residential development and would, therefore, not substantially conflict with the City's policy of achieving a balance of jobs and housing. **(Less Than Significant Impact)**

3.14.3 Conclusion

Impact PH-1:	Development proposed under the Specific Plan would not result in impacts related to population growth and implementation of standard measures, SM PH-1 and SM PH-2, would ensure that substantial numbers of housing units or people are not displaced without the provision of replacement housing assistance.
Standard Measures	SM PH-1 and SM PH-2
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

Impact PH-2:	Development proposed under the Specific Plan would provide employment opportunities in conjunction with residential development and would, therefore, not substantially conflict with the City's policy of achieving a balance of jobs and housing.
Standard Measures	None
Impact After Standard Measures	Less Than Significant
Mitigation Measures	None
Impact After Mitigation	Less Than Significant

SECTION 4.0 GROWTH-INDUCING IMPACTS

As stated in the *CEQA Guidelines*, Section 15126.2(d), a project is considered growth-inducing if it would:

- Directly or indirectly foster economic or population growth, or the construction of additional housing in the surrounding environment.
- Remove obstacles to population growth or tax community service facilities to the extent that the construction of new facilities would be necessary.
- Encourage or facilitate other activities that would cause significant environmental effects.

The proposed Specific Plan would directly foster economic and population growth in and around the Downtown area of Morgan Hill by allowing increased commercial, office, and residential development in the area. The Specific Plan allows "infill" development, meaning that the Specific Plan project area is well within the City's existing urban boundaries, is already served by existing and planned infrastructure, and has long been planned for urban uses. The City will continue to upgrade pipelines within the Specific Plan project area to current City standards, in accordance with the Water Master Plan, Sanitary Sewer Master Plan, and Capital Improvement Program. The increased pipeline capacity in the Specific Plan project area would bring the existing infrastructure up to current City standards and would not remove a substantial obstacle to population growth or tax community services such that additional new facilities would be necessary.

Morgan Hill voters have approved a ballot measure to exempt development of 500 residential units by 2020 in the Specific Plan area from the City's Residential Development Control System while maintaining the Citywide 48,000 population cap. This provision of the proposed plan would require voter approval. Also, the City Council could allocate downtown set asides under the existing RDCS ordinance to accommodate the desired level of development in Downtown. The Council's objective is to remove obstacles to growth in the Downtown area, however, it would not foster other growth outside the Specific Plan project area. The proposed Specific Plan has been found to not tax existing services and facilities in the community such that the construction of new facilities would be required as a result of the project (refer to *Sections 3.8 Utilities and Service Systems* and *3.13 Public Facilities and Services*). The proposed Specific Plan would not allow development where development does not currently exist nor would it create a precedent for growth outside the existing urban envelope.

Impact GI-1: The proposed Specific Plan would not result in significant growth-inducing impacts. **(Less Than Significant Impact)**

SECTION 5.0 CUMULATIVE IMPACTS

5.1 INTRODUCTION

Cumulative impacts, as defined by CEQA, consist of two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. Cumulative impacts may result from individually minor, but collectively significant projects taking place over a period of time. Section 15130 of the *CEQA Guidelines* states that an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable, as defined in section 15065(c)." The discussion does not need to be as detailed as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision-makers to better understand the potential impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present and probable future projects or a summary of projections from an adopted General Plan or similar document. The effects of past projects are generally reflected in the existing conditions described in the specific sections of this EIR.

The discussion below addresses two aspects of cumulative impacts: (1) would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question and, if that cumulative impact is likely to be significant, (2) would the contributions to that impact from the project which is the subject of this EIR be cumulatively considerable.

5.1.1 Cumulative General Plan Amendments (GPAs) and Urban Service Area Boundary Amendments (USA)

A list of pending General Plan and Urban Service Area Boundary Amendments is provided in Table 5.1-1. The pending General Plan Amendment locations are shown on Figure 23. Because the proposed Downtown Specific Plan amends the City's General Plan, the method used to analyze cumulative impacts combines elements of both the "list" method and the adopted General Plan method. This cumulative discussion is based on projected development in 2030 under the current General Plan with the proposed General Plan Amendments.

Several of the cumulative General Plan Amendments are located at or near the City limits and Urban Service Area boundary. General Plan Amendments, including annexations, near the urban edge can create a precedent for growth outside the existing urban envelope and may be growth inducing. As discussed in Section 4.0, the Specific Plan project area is well within the City's existing urban boundaries, is already served by existing infrastructure, and has long been planned for urban uses. It would not allow development where development does not currently exist nor would it create a precedent for growth outside the existing urban envelope. The proposed Specific Plan, therefore, would not make a cumulatively considerable contribution to cumulative growth-inducing impacts and this impact is not discussed further.

Table 5.1-1
List of Pending General Plan and Urban Service Area Boundary Amendments

Project Name/Location		Size	Change in 2030 General Plan Assumptions
USA 1	West Hill Community Church, west side of Dewitt Avenue near Spring Avenue	10.6 acres	Increase of 9,000 s.f. of building space
USA 2	Peet – Trumpp, west side of Peet Road and north of Half Road	6 acres	Add single family residences into the Urban Service Area.
USA 3	Monterey – Morgan Hill Bible Church, 15055 Monterey Highway	50.17 acres	Add parcels into the Urban Service Area and replace approximately 11,600 s.f. of church and school space with approximately 20,000 s.f. of the same land use; Add parcels into the Urban Service Area and amend General Plan and Zoning to bring existing uses into conformance (USA-08-09, GPA-08-09, ZA-08-10)
USA & GPA 4	Watsonville – Royal Oaks, SW corner of Watsonville Road and Monterey Road and Watsonville Road west of Monterey Road	16.91 acres	Decrease of 45 single family residences; Increase of 100 multi-family units, 180 senior units, and 6,000 s.f. of retail space
GPA 5	Cochrane – Fountain Glen Properties, SE corner of Cochrane Road and Butterfield Boulevard.	20.43 acres	Decrease of 64,000 s.f. of service and 112,000 s.f. of office; Increase of 280 senior residential units, 31,000 s.f. of retail space, and a 300 student elementary school
GPA 6	Walnut Grove Extension Realignment/Simonsen – DeRose, north of Laurel Road	11.46 acres	Increase of 113,500 s.f. of commercial and the realignment of the Walnut Grove extension north of Dunne Avenue to connect to Diana Avenue
GPA 7	Hale-Signature Properties, between Hale Avenue and UPRR tracks south of residential development on Tarragon Avenue and north of residential land use on Campoli Drive	30 acres	Increase of 120 residential units
GPA 8	Downtown Specific Plan (analyzed in this EIR)	161 acres	Refer to *Section 2.0 Project Description*
GPA 9	Butterfield – Berg & Berg, west of Butterfield between Sutter Blvd. and Jarvis Drive	56 acres	Decrease of 247,000 s.f. of R&D/industrial, 15,000 s.f. of office, and 150,000 s.f. of warehouse space; Increase of 25,000 s.f. of retail, 60 multi-family units and 446 single family units
--	Bay Area to Central Valley High-Speed Train Program	--	Bay Area to Central Valley and Southern California; UPRR right-of-way through downtown Morgan Hill.

LOCATIONS OF GENERAL PLAN LAND USE AMENDMENT APPLICATIONS

FIGURE 23

5.1.2 Proposed Circulation Element Update

5.1.2.1 *Roadway/Corridor Modifications*

The proposed General Plan Circulation Element Update is also included in the cumulative analysis. Thirteen roadways in the City would have their future configuration modified with approval of the proposed Circulation Element. The roadways and segments that would be modified under the proposed Circulation Element are shown in Table 5.1-2.

Table 5.1-2
Summary of Proposed Circulation Element Roadway/Corridor Modifications

Roadway/Corridor	Segment(s)	Existing Planned Width	Proposed Planned Width
Monterey Road	Watsonville Road to Middle Road	Six Lanes	Four Lanes
Monterey Road (Option)	Main Avenue to Dunne Avenue (Downtown)	Four Lanes	Two Lanes
Butterfield Boulevard	Cochrane Road to Monterey Road	Six Lanes	Four Lanes
Santa Teresa/ Hale Corridor	Spring Avenue to Tilton Avenue	Four Lanes	Two Lanes
Murphy Avenue/ Mission View Corridor	North of Cochrane Road and South of Half Road	Four Lanes	Two Lanes
Murphy Avenue/ Mission View Corridor	Cochrane Road to Half Road	Two Lanes	Two Lanes
Hill Road Corridor	Entire Length	Four Lanes	Two Lanes
Condit Road	Entire Length	Four Lanes	Two Lanes
Edmundson Avenue	Piazza Way to Santa Teresa/ Hale Corridor	Four Lanes	Two Lanes
Madrone Parkway	Entire Length	Four Lanes	Two Lanes
Tennant Avenue	Hill Road to Murphy Avenue	Four Lanes	Two Lanes
Tennant Avenue	US 101 to Butterfield Boulevard	Four Lanes	Six Lanes
Cochrane Road	Mission View Drive to Peet Road	Four Lanes	Two Lanes
Watsonville Road	La Alameda to Santa Teresa/ Hale Corridor	Four Lanes	Two Lanes
Middle Road	Monterey Road to Murphy Road	Four Lanes	Two Lanes

5.1.2.2 *Railroad Crossings*

The existing General Plan Circulation Element identifies two locations where grade-separated crossings of Union Pacific Railroad (UPRR) tracks are planned: Dunne Avenue and the Butterfield South Extension. The proposed Circulation Element update would add Madrone Parkway as a planned grade-separation. The proposed Circulation Element would also allow for, with the concurrence of the PUC and UPRR, establishing a new two-lane at-grade crossing for Madrone Parkway, in exchange for closing the existing two-lane at-grade crossing at San Pedro Avenue.

5.1.2.3 *Alternative Roadway Improvement Scenarios*

This cumulative analysis also evaluates alternative scenarios for several of the planned roadway improvements in the Circulation Element. The possible changes include narrowing Monterey Road through Downtown (Project Alternate), removing the planned Dunne Avenue grade separation,

shifting the planned alignment of the Walnut Grove extension, and removing the San Pedro Avenue/Spring Avenue connection. These possible modifications are discussed in further detail below.

Monterey Road Narrowing (Project Alternate)

The alternative roadway scenario includes narrowing Monterey Road in Downtown Morgan Hill from a four-lane to a two-lane arterial between Main Avenue and Dunne Avenue. The Monterey Road narrowing removes a northbound and southbound through lane from the intersections at Main Avenue/Monterey Road and Dunne Avenue/Monterey Road. The purpose of this modification is to allow for wider sidewalks, increased on-street parking supply, and enhancement of the downtown area as a more walkable, bikeable, and transit-friendly environment. A variation of this alternative scenario would narrow Monterey Road between Main Avenue and roughly 5th Street, which would improve the operation of the Dunne Avenue/Monterey Road intersection.

Planned Walnut Grove Alignment

The planned alignment of Walnut Grove Drive would extend south from Diana Avenue to Laurel Road, starting at the existing southern terminus of Walnut Grove Drive just south of Diana Avenue. The alternative scenario would shift the planned alignment of Walnut Grove Drive approximately 1,500 feet west of the currently planned alignment. Under this scenario, the connection would extend from the terminus of Walnut Grove Drive, just north of Dunne Avenue (near the intersection of Walnut Grove Drive and Laurel Road), northbound to Diana Avenue.

San Pedro to Spring Avenue Connection

Rather than connecting San Pedro Avenue to Spring Avenue as planned in the 2001 General Plan Circulation Element, this scenario maintains the existing alignment with modifications to intersection control and access on Monterey Road at Spring Avenue and San Pedro Avenue.

Planned Dunne Avenue Grade Separation

The current Circulation Element includes a planned grade-separation at the Dunne Avenue railroad crossing, which requires the closure of Depot Street at Dunne Avenue. Under this scenario, the grade-separation would be removed from the Circulation Element and the existing connection of Depot Street to Dunne Avenue would remain or Depot Street could be re-routed through the existing Community and Cultural Center parking lot to create an intersection with Church Street and the grade separation could be retained.

5.1.2.4 *Proposed LOS Policy Modifications*

This cumulative analysis also includes proposed changes to the City's level of service (LOS) policy. The proposed modifications to the LOS Policy would provide a tiered approach to acceptable LOS standards. The LOS standard for all intersections within the City would be reduced from LOS D+ to LOS D, with two exceptions: 1) LOS F would be allowed for intersections and street segments within the Downtown Core area (i.e., the area bounded by Dunne Avenue, Del Monte, Main Avenue, and Depot Street), and 2) LOS E would be allowed at certain intersections and segments due to their location in the downtown periphery, within freeway access zones, or because the intersection provides alternate routes for regional through traffic and widening would encourage regional through

traffic on local streets. The intersections located within the Downtown periphery where LOS E would be allowed include the following:

- Monterey Road and Wright Road
- Monterey Road and Central Avenue (unsignalized)
- Butterfield Boulevard and East Main Avenue
- Butterfield Boulevard and East Dunne Avenue
- Hale/Santa Teresa and West Main Avenue

The freeway access zones where LOS E would be allowed are defined as the following:

- Cochrane Road Freeway Access Zone – The intersection of Madrone Parkway and Cochrane Road to the intersection of Cochrane Road and Mission View Drive.
- Dunne Avenue Freeway Access Zone – The intersection of Walnut Grove and East Dunne Avenue to the intersection of Murphy Road and East Dunne Avenue.
- Tennant Avenue Freeway Access Zone – The intersection of Butterfield Boulevard and Tennant Avenue to the intersection of Murphy Road and Tennant Avenue.

The intersections that provide alternate routes for regional through traffic where LOS E would be allowed include the following:

- Santa Teresa Avenue and West Dunne Avenue
- Cochrane Road and Monterey Road
- Tennant Avenue and Monterey Road
- Watsonville Road/Butterfield Boulevard and Monterey Road
- Madrone Parkway and Monterey Road

5.2 DISCUSSION OF CUMULATIVE IMPACTS

For each identified impact, the Project and Project Alternate contributions to the impact would be identical, unless otherwise noted.

5.2.1 Cumulative Land Use Impacts

5.2.1.1 *Overview*

Approval of the proposed General Plan Amendments (GPAs) in Morgan Hill (see list of cumulative General Plan Amendments in Table 5.1-1) would result in several Urban Service Area expansions and annexations (i.e., Projects 1-3), intensification of allowed residential development and/or commercial development on currently vacant properties, shifts in various allowed uses, and additional church buildings on two existing church sites at or near the City limits. Allowed uses on one site would shift from *Public/Quasi-Public* (e.g., school uses) to residential. Several changes in planned roadways on the City of Morgan Hill Circulation Element map are also proposed.

As shown on Figure 23, Projects 5 and 6 (Cochrane-Fountain Glen Properties and Laurel-Simonsen/DeRose) are the two pending projects closest to the Specific Plan project area. The other General Plan Amendment projects are generally located at or near the boundary of the City's Urban Service Area.

5.2.1.2 *Cumulative Land Use Compatibility Impacts*

Cumulative development in 2030 includes a mixture of development of vacant land and to a lesser extent, redevelopment. On a number of GPA sites, proposed changes in allowed uses would be an intensification of use (i.e., from single family residential to multi-family residential). Several of the GPAs (Projects 1, 5, 6, and 7) are adjacent to or near existing residences.

The compatibility of new development with adjacent and planned development and the general character of surrounding areas are considered as a part of the City of Morgan Hill's architectural and environmental review processes. Through appropriate site design and review of these projects, land use compatibility impacts such as visual intrusion, lighting spillover, and noise would be avoided.

The project, and other cumulative development through 2030 in Morgan Hill, would not result in significant cumulative land use compatibility impacts.

Impact C-LU-1: Development approved through existing procedures, in accordance with the Morgan Hill General Plan, the proposed Specific Plan, and the City's zoning ordinance would minimize the likelihood that the cumulative projects would result in significant cumulative land use compatibility impacts. **(Less Than Significant Cumulative Impact)**

5.2.1.3 *Cumulative Loss of Open Space and Agricultural Lands*

Several of the cumulative projects include development of vacant property at the urban edge and/or agricultural land. The proposed project is located in downtown Morgan Hill which does not contain land used for agricultural production. The Downtown Specific Plan would not result in loss of open space or agricultural lands and, therefore, would not contribute to a cumulative loss of these resources. The City is currently developing agricultural and open space conversion policies; however, none of the Specific Plan project area would impact these land uses.

Impact C-LU-2: Implementation of the Specific Plan would not contribute to a cumulative loss of open space or agricultural lands. **(Less Than Significant Cumulative Impact)**

5.2.1.4 *Conclusions Regarding Cumulative Land Use Impacts*

Impact C-LU-1: Cumulative development is not anticipated to result in significant land use compatibility impacts. **(Less Than Significant Cumulative Impact)**

Impact C-LU-2: The proposed project would not contribute to a cumulative loss of open space or agricultural lands. **(Less Than Significant Cumulative Impact)**

5.2.2 Cumulative Transportation Impacts

The cumulative transportation analysis evaluated the cumulative impacts associated with the proposed project. The 2030 cumulative conditions analysis includes all proposed and anticipated General Plan amendments that might be implemented by 2030. These General Plan amendments are within the City but outside of the downtown area.

In addition to the land use designation changes listed in Table 5.1-1, the City is currently studying revisions to its Circulation Element as discussed in detail in Section 5.1.2 above. The revisions being evaluated include reducing the acceptable LOS standard for signalized intersections from LOS D+ to LOS D citywide. Acceptable operations for unsignalized intersections would remain LOS D. In addition, intersections in the Downtown (i.e., intersections within the area bounded by Del Monte Avenue, Depot Street, Main Avenue, and Dunne Avenue) would be exempt from the LOS policy, which would allow those intersections to operate below LOS D+, even to LOS F. This policy would prevent widening of these intersections to increase vehicle capacity as mitigation for significant impacts. The purpose of this proposed policy change is to avoid substantial increases to intersection crossing distances, allow wider sidewalks and traffic calming measures, and create a more human-scale multi-modal-friendly environment in the Downtown.

5.2.2.1 *Cumulative Roadway Improvements and Traffic Estimates*

Included in the cumulative transportation impact analysis are several pending General Plan Circulation Element amendments that would modify the 2030 roadway network (refer to Section 5.1.2). In addition, several alternate roadway network amendments are analyzed including the narrowing of Monterey Road to two lanes from Main Avenue to Dunne Avenue, realigning the extension of Walnut Grove to Diana Avenue west of James Lex Lane, and maintaining the existing alignment of San Pedro Avenue to Spring Avenue. The cumulative analysis also analyzes the impacts of removing the grade separation of Dunne Avenue under the UPRR tracks to allow the existing Depot Street intersection with Dunne Avenue to remain or realigning Depot Street to create an intersection with Church Street and Dunne Avenue and maintaining the planned UPRR grade separation over Dunne Avenue.

Estimated traffic volumes under cumulative conditions consist of traffic volumes projected for 2030 under the existing General Plan plus traffic generated by pending General Plan amendments. Conditions in 2030 with the project and pending General Plan amendments (Cumulative) are summarized in Table 5.2-1.

5.2.2.2 *Cumulative Intersection Levels of Service*

For the purpose of this analysis, a significant cumulative impact would result at a signalized intersection if cumulative traffic either would result in a deterioration of Level of Service to D or worse or increase the average critical delay by four (4) seconds or more and the volume-to-capacity ratio (V/C) by 0.01 at signalized intersections operating at LOS D or worse under Existing Conditions. For an unsignalized intersection, a traffic signal warrant also must be met where Level of Service is D or worse.

The results of the intersection level of service analysis under cumulative conditions for the proposed project are provided in Table 5.2-1 and discussed below.

Table 5.2-1
Existing Conditions and 2030 Cumulative Levels of Service

	Intersection	Peak Hour	Existing		2030 Cumulative Conditions				
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?[5]
1	Monterey Road/	AM	27.6	C	34.1	C-	0.386	5.5	N/A
	Cochrane Road	PM	29.1	C	34.5	C-	0.387	9.1	N/A
2	Butterfield Boulevard/	AM	16.7	B	36.2	D+	0.341	21.2	N/A
	Cochrane Road	PM	13.0	B	37.3	D+	0.475	31.3	N/A
3	Monterey Road/	AM	16.0	C	>150	F	N/A	N/A	No
	Central Avenue (us)	PM	23.2	C	>150	F	N/A	N/A	No
4	Monterey Road/	AM	10.7	B	15.0	C	N/A	N/A	N/A
	Keystone Avenue (us)	PM	10.5	B	15.8	C	N/A	N/A	N/A
5	Monterey Road/	AM	43.4	D	**139.0**	**F**	0.706	138.5	N/A
	Main Avenue[6]	PM	42.4	D	**80.6**	**F**	0.430	51.5	N/A
6	Del Monte Street/	AM	13.5	B	19.4	C	N/A	N/A	N/A
	Main Avenue (us)	PM	19.1	C	25.2	D	N/A	N/A	N/A
7	Hale Avenue/	AM	11.0	B	33.5	C-	0.766	31.5	N/A
	Main Avenue (us)	PM	13.2	B	32.5	C-	0.692	34.1	N/A
8	Depot Street/	AM	15.9	C	20.9	C+	0.603	21.5	N/A
	Main Avenue (us)	PM	25.6	D	18.8	B-	0.672	26.6	N/A
9	Monterey Road/	AM	10.2	B	15.1	C	N/A	N/A	N/A
	First Street (us)	PM	10.9	B	17.8	C	N/A	N/A	N/A
10	Monterey Road/	AM	10.7	B+	13.9	B	0.360	5.4	N/A
	Second Street	PM	12.5	B	15.4	B	0.379	4.9	N/A
11	Monterey Road/	AM	10.5	B	15.3	C	N/A	N/A	N/A
	Third Street (us)	PM	11.1	B	19.3	C	N/A	N/A	N/A
12	Monterey Road/	AM	14.2	B	52.7	F	N/A	N/A	No
	Fourth Street (us)	PM	18.9	C	>150	F	N/A	N/A	No
13	Monterey Road/	AM	17.9	C	79.4	F	N/A	N/A	No
	Fifth Street (us)	PM	17.0	C	94.0	F	N/A	N/A	No
14	Monterey Road/	AM	28.6	C	34.7	C-	0.339	8.3	N/A
	Dunne Avenue	PM	36.6	D+	**48.2**	**D**	**0.353**	**19.1**	N/A
15	Del Monte Street/	AM	12.0	B	37.4	E	N/A	N/A	No
	Dunne Avenue (us)	PM	15.0	B	**73.8**	**F**	N/A	N/A	**Yes**
16	Church Street/	AM	18.8	B-	22.6	C+	0.124	4.3	N/A
	Dunne Avenue	PM	19.5	B-	22.9	C+	0.185	5.3	N/A
17	Butterfield Boulevard/	AM	30.7	C	32.9	C-	0.100	0.9	N/A
	Dunne Avenue	PM	39.4	D	39.5	D	0.141	0.7	N/A
18	US 101 SB Ramps/	AM	20.7	C+	20.8	C+	0.136	1.7	N/A
	Dunne Avenue	PM	21.5	C+	23.2	C	0.055	1.8	N/A
19	US 101 NB Ramps/	AM	14.4	B	13.7	B	0.037	-0.6	N/A
	Dunne Avenue	PM	12.7	B	15.4	B	0.007	2.7	N/A
20	Condit Road/	AM	32.7	C-	32.3	C-	0.032	0.3	N/A
	Dunne Avenue	PM	28.3	C	32.3	C-	0.007	5.1	N/A
21	Monterey Road/	AM	25.6	C	34.1	C-	0.065	10.3	N/A
	Tennant Avenue	PM	32.8	C-	31.7	C	0.055	0.7	N/A
22	Butterfield Boulevard/	AM	34.4	C-	**39.3**	**D**	**0.197**	**2.4**	N/A
	Main Avenue	PM	37.7	D+	**39.1**	**D**	**0.264**	**3.0**	N/A

Table 5.2-1
Existing Conditions and 2030 Cumulative Levels of Service

Intersection		Peak Hour	Existing		2030 Cumulative Conditions				
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	Δ in Crit. V/C[3]	Δ in Crit. Delay[4]	Signal Warrant Met?[5]
23	Condit Road/	AM	10.8	B+	11.3	B+	0.119	0.6	N/A
	Main Avenue	PM	9.9	A	9.1	A	0.161	-1.5	N/A
24	Hale Avenue/Dunne	AM	Future		28.0	C	0.692	29.9	N/A
	Avenue (Future only)	PM	Intersection		26.0	C	0.593	25.0	N/A

Notes:
Significant impacts identified in **bold** text.
(us) = unsignalized intersection
[1] Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 HCM, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[2] LOS = Level of service. LOS calculations conducted using the TRAFFIX LOS analysis software package.
[3] Change in the critical volume-to-capacity ratio (V/C) between Existing and 2030 Cumulative Conditions.
[4] Change in critical movement delay between Existing and 2030 Project Conditions.
[5]Peak hour signal warrant analysis completed for unacceptable unsignalized intersection operations.
[6]No feasible improvements are available to provide LOS D+ or better operations due to building and right-of-way constraints.

Signalized Intersections

Three signalized intersections would operate at unacceptable levels of service under cumulative conditions. The intersection levels of service and changes in average delay for each of these intersections are described below.

Monterey Road/Main Avenue – The addition of cumulative traffic (and the narrowing of Monterey Road) would degrade the intersection operations from LOS D to LOS F during the AM and PM peak hours and the average delay would increase by more than four seconds and the V/C would be greater than 0.01. This is a significant cumulative impact.

Monterey Road/Dunne Avenue – The addition of cumulative traffic and the narrowing of Monterey Road would degrade the intersection operations from LOS D+ to LOS D during the PM peak hour. This is a significant cumulative impact.

Butterfield Boulevard/Main Avenue – The addition of cumulative traffic at this location would degrade the intersection operations from LOS C- and LOS D+ to LOS D during the AM and PM peak hours, respectively. This is a significant cumulative impact.

Unsignalized Intersections

One unsignalized study intersection, Dunne Avenue and Del Monte Street is projected to degrade from LOS B to LOS F during the PM peak hour under 2030 cumulative conditions. This intersection would meet the peak-hour warrant criteria for signalization during both the PM peak hour. The project, and other pending projects, would result in a cumulative transportation impact to the Dunne Avenue and Del Monte Street intersection.

Impact C-TRANS-1: The proposed project, along with other pending General Plan amendments, would result in significant cumulative impacts to three signalized

intersections and one unsignalized intersection. **(Significant Cumulative Impacts)**

As previously discussed, one of the cumulative projects is revision of the City's LOS policy. The cumulative effect of amending the LOS Policy, as currently proposed, would be that none of the impacts identified above would be considered to be significant (refer to Table 5.2-1).

5.2.2.3 *Mitigation Measures for Intersection Level of Service Impacts*

MM C-TRANS-1.1: Monterey Road/Main Avenue. The combination of cumulative traffic from all of the proposed projects and from implementation of the Project Alternate to narrow Monterey Road to one lane in each direction would cause the intersection to operate at LOS F during the AM and PM peak hours. To mitigate this impact, Main Avenue would need protected east/west phasing with modifications to the eastbound approach (i.e., a left-turn lane and a shared-through right) and widening the westbound approach (i.e., separate left, through, and right lane with an overlap phase). The southbound approach of Monterey Road would also need to be widened (i.e. two southbound left-turn lanes, a through-lane, and a shared through-right lane) and the northbound approach would require a northbound left-turn lane, a through-lane, and a shared through-right lane. The northbound approach would conflict with the potential narrowing of Monterey Road from four to two lanes between Main Avenue and Dunne Avenue.

The implementation of this mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. At the time the adjacent blocks redevelop with new buildings a lane could be added, however, one of the City's policies for the Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and roadway widths that do not increase the visual separation between uses or allow for increased vehicle speeds in pedestrian oriented areas. Widening of Main Avenue and narrowing sidewalks would conflict with the policies of the Downtown Specific Plan regarding multi-modal circulation and streetscapes. This mitigation would require removal of buildings or conflict with the City's objectives for transportation improvements in this area and, therefore, the impact at this intersection is significant and unavoidable.

MM C-TRANS-1.2: Monterey Road/Dunne Avenue. The addition of cumulative traffic and the narrowing of Monterey Road would degrade the intersection operations from LOS D+ to LOS D during the PM peak hour. This intersection requires an eastbound right-turn overlap phase, and a southbound approach with a left-turn lane, through lane and shared through-right lane to operate acceptably (LOS D+ or better) and reduce the project's contribution to this cumulatively significant impact. These improvements (two southbound through lanes at this intersection) would conflict with narrowing of Monterey Road and the installation of traffic calming and pedestrian improvements evaluated as the project alternate.

One of the City's goals for the proposed Downtown Specific Plan is to create a vibrant downtown destination with pedestrian-friendly amenities including widened sidewalks and traffic calming measures. This mitigation is not consistent with the priority of reducing vehicle speeds on Monterey Road and is not proposed by the project. During a future Monterey Road streetscape planning process, the City of Morgan Hill should explore the feasibility and desirability of incorporating this mitigation measure, to retain additional lanes in the block of Monterey Road, between Dunne Avenue and Fifth Street.

MM C-TRANS-1.3: Main Avenue and Butterfield Boulevard. The addition of cumulative traffic at this location would degrade the intersection operations from LOS C- and LOS D+ to LOS D during the AM and PM peak hours, respectively. This intersection requires a second northbound left-turn to operate acceptably. However, this improvement may require right-of-way from the northwest and southeast corners of the intersection, and physical constraints exist along the east side of Butterfield Boulevard due to the open canal. Overall, the implementation of a second northbound left-turn lane is considered physically feasible and would mitigate this impact to a less than significant level. The City of Morgan Hill will monitor this intersection and implement this measure at such time, based on monitoring of LOS and anticipated traffic from approved developments, that the intersection will degrade below an acceptable level of service.

MM C-TRANS-1.4: Dunne Avenue and Del Monte Street. The addition of cumulative traffic at this location would degrade intersection operations from LOS B to LOS E and LOS F during the AM and PM peak hours, respectively. The peak-hour traffic volumes at this intersection would meet the peak-hour signal warrant during the PM peak hour and installation of a traffic signal would mitigate the impact at this intersection and provide LOS C (20.6 seconds of average delay) and LOS C+ (20.8 seconds of average delay) operations during the AM and PM peak hour. The City of Morgan Hill will monitor this intersection and implement this measure at such time, based on monitoring of LOS and anticipated traffic from approved developments, that the intersection will degrade below an acceptable level of service.

5.2.2.4 *Cumulative Freeway Level of Service Impacts*

The proposed project is expected to add between 0.12 and 0.54 percent of the capacity to the freeway study segments (refer to Table 3.2-13).

The proposed project would not add traffic equal to at least one percent of a freeway segment's capacity and is not adjacent to a freeway segment access or egress point. According to the adopted Congestion Management Program (CMP) TIA Guidelines, a cumulative freeway level of service analysis is not required.

As previously described, it should be noted that Caltrans has accepted the adopted CMP TIA methodologies, and it is appropriate to use the adopted CMP standard as the threshold of significance for impacts to the freeways.

It is also relevant to disclose, however, that Caltrans also states that it strives to maintain freeway facilities at the LOS C/D cusp per its Guide for Preparation of Traffic Impact Studies (December 2002). If the Caltrans LOS C/D was used as the threshold of significance for freeway impacts, then impacts to US 101 would be considered significant and unavoidable.

The Valley Transportation Authority and Caltrans are the responsible agencies for planning for and implementing improvements within the US 101 corridor. A fair share contribution from the City of Morgan Hill toward freeway improvement costs would be an acceptable mitigation measure; however, significant impacts are not reduced or eliminated until the freeway improvements are implemented. Additional sources would be needed to provide adequate funding, which can include State Transportation Improvement Program funds for projects identified in the Valley Transportation Plan 2030, impact fees from other jurisdictions, and/or a regional impact fee. The City has implemented an impact fee to develop some of the local Morgan Hill roadway improvement but does not have a funding strategy in place to contribute towards regional improvements, and there is no regional or state impact fee program established. City representatives do and will continue to work collaboratively with San José, Gilroy, Santa Clara County, counties to the south (i.e. Monterey, San Benito, and Merced Counties), the Valley Transportation Authority, and Caltrans to prepare and develop a funding strategy for South County freeway improvements. Payment of traffic impact fees or a fair share contribution would be expected to fulfill the City's obligations for mitigating regional traffic impacts; however, unless other funding sources such as a new regional impact fee, additional sales tax measures, contributions from other developers, or state funds are made available, feasible freeway and regional improvements to meet the Caltrans freeway LOS standard will not be implemented. As previously stated, it is appropriate that this EIR is based on the adopted CMP threshold of significance for freeway impacts, but it can be noted that if the LOS "C/D cusp" standard desired by Caltrans were to be considered, then projects that cause traffic to be added to freeway segments that operate below that level would be considered to create significant and unavoidable impacts, given, as discussed above, that there is no identified regional feasible mitigation measure or program that would ensure that improvements are made to achieve Caltrans' desired level of service on the freeway segments.

5.2.2.5 *Conclusions Regarding Cumulative Transportation Impacts*

Impact C-TRANS-1: Mitigation measures would reduce the cumulative impact at the Butterfield Boulevard/Main Avenue and Dunne Avenue/Del Monte Street intersections to less than significant levels. The project would contribute to significant unavoidable impacts to two signalized intersections: Main Avenue/Monterey Road and Dunne Avenue/Monterey Road. **(Significant Unavoidable Cumulative Impacts)**

5.2.3 Cumulative Noise and Vibration Impacts

5.2.3.1 *Noise Impacts*

For the purposes of this analysis, a substantial permanent cumulative noise increase would occur if the project contributed a minimum noise increase of one dBA L_{dn} where cumulative noise levels are anticipated to increase by three dBA L_{dn} or more.

A High-Speed Train project is envisioned along the UPRR right-of-way through downtown Morgan Hill. According to the Draft Bay Area to Central Valley High-Speed Train (HST) Program

EIR/EIS,[79] the proposed High-Speed Train would use electrical power and operate in an exclusive right-of-way with no at-grade crossings which would avoid the need to sound train horns during passbys through the Specific Plan project area. A review of the information presented in HST Program EIR/EIS indicates that noise levels from such trains would be comparable to the sounds of conventional trains assuming that these trains would be traveling below 100 miles per hour through the City of Morgan Hill. The UPRR would not be grade separated under the Project Alternate and future noise levels from freight and passenger trains would continue to result primarily from the sounding of their train warning whistles.

Traffic noise levels along major roadways are anticipated to increase by one to two dBA L_{dn} overall as a result of project development anticipated by 2030 (refer to Appendix D). The project's contribution to these overall noise increases would be less than one dBA L_{dn}. The project and other cumulative development through 2030, therefore, would not result in a significant cumulative noise impact.

Impact C-NV-1: Implementation of the proposed project, along with cumulative development through 2030 would not substantially increase ambient noise levels. **(Less Than Significant Cumulative Impact)**

5.2.3.2 *Vibration Impacts*

Based on the Draft Bay Area to Central Valley High-Speed Train Program EIR/EIS, vibration levels caused by passbys of the High-Speed Train would be similar to conventional steel wheel/steel rail trains; however, slightly lower than conventional trains due to the advanced track technology, track and wheel standards, and maintenance standards. Vibration levels resulting from the High-Speed Train, therefore, are anticipated to be at or below ambient vibration levels from conventional railroad trains.

Impact C-NV-2: Implementation of cumulative development through 2030 would not substantially increase exposure of residences or other sensitive receptors to groundborne vibration levels. **(Less Than Significant Cumulative Impact)**

5.2.3.3 *Conclusions Regarding Cumulative Noise Impacts*

Impact C-NV-1: Implementation of the proposed project, along with cumulative development through 2030 would not substantially increase ambient noise levels. **(Less Than Significant Cumulative Impact)**

Impact C-NV-2: Implementation of cumulative development through 2030 would not substantially increase exposure of residences or other sensitive receptors to groundborne vibration levels. **(Less Than Significant Cumulative Impact)**

5.2.4 Cumulative Air Quality Impacts

As described in *Section 3.4.2.3*, the proposed General Plan amendments and Specific Plan due to their infill location, mix of proposed uses, and adherence to the RDCS population cap are consistent with the Clean Air Plan. The BAAQMD CEQA Guidelines state that the cumulative impacts of a specific plan should focus on the plan's consistency with the regional air quality plan.

[79] California High Speed Rail Authority and Federal Railroad Administration. Draft Bay Area to Central Valley High-Speed Train (HST) Program EIR/EIS. Volume 1: Report. July 2007.

The Final EIR prepared for the Morgan Hill General Plan in 2001 found that General Plan growth would result in Vehicles Miles Traveled (VMT) growing faster than population. With mitigation, the General Plan was found to demonstrate reasonable efforts to implement the TCM's in the regional Clean Air Plan. Even with mitigation, the Morgan Hill General Plan was found to result in VMT increasing faster than population. This was identified as a significant and unavoidable impact.

The adoption and implementation of the proposed Downtown Specific Plan would have a beneficial impact on reducing the rate of increase in regional Vehicles Miles Traveled when compared to the projected development by 2030 under the existing General Plan. The project would not increase population projections, but would result in shorter and fewer vehicle trips. The rate of residential growth is controlled by the City's Residential Development Control System that limits new residences in the City to approximately 250 units per year. Given that the RDCS and General Plan retain the 48,000 population cap, the increased emphasis on downtown infill development resulting from the Specific Plan, either through the passage of the ballot measure or continued RDCS downtown set-asides by the City Council, supports the goals of the Clean Air Plan.

The project would be consistent with the Transportation Control Measures that comprise the regional air quality plan. Specifically, Regional Transportation Control Measure 15 (Local Land Use Planning and Development Strategies) commits the BAAQMD, MTC and ABAG to the promotion of Smart Growth patterns of development. The project is an infill development, providing high density residential development, mixed uses, and a range of housing opportunities with access to transit. The proposed project, therefore, is consistent with the regional Clean Air Plan and would not contribute to a significant cumulative air quality impact.

Impact C-AIR-1: Development allowed under the Specific Plan is consistent with the adopted regional Clean Air Plan and, therefore, would not contribute to a cumulative air quality impact. **(Less Than Significant Cumulative Impact)**

5.2.4.2 *Conclusions Regarding Cumulative Air Quality Impacts*

Impact C-AIR-1: Development allowed under the Specific Plan is consistent with the adopted regional Clean Air Plan and, therefore, would not contribute to a cumulative air quality impact. **(Less Than Significant Cumulative Impact)**

5.2.5 Cumulative Global Climate Change Impacts

This section provides a general discussion of global climate change and focuses on emissions from human activities that alter the chemical composition of the atmosphere. The discussion on global climate change and greenhouse gas emissions is based upon the California Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32), the 2006 Climate Action Team (CAT) Report to Governor Schwarzenegger and the Legislature, and research, information and analysis completed by the Intergovernmental Panel on Climate Change (IPCC), the United States Environmental Protection Agency, California Air Resources Board and the CAT. Estimates of greenhouse gas emissions for several components of the project are provided in Appendix E of this EIR.

Global climate change refers to changes in weather including temperatures, precipitation, and wind patterns. Global temperatures are modulated by naturally occurring and anthropogenic-generated (generated by mankind) atmospheric gases such as carbon dioxide, methane, and nitrous oxide.[80]

[80] 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 [Solomon, S.,

These gases allow sunlight into the Earth's atmosphere but prevent heat from radiating back out into outer space and escaping from the earth's atmosphere, thus altering the Earth's energy balance. This phenomenon is known as the greenhouse effect.

Naturally occurring greenhouse gases include water vapor[81], carbon dioxide, methane, nitrous oxide, and ozone. Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but are for the most part solely a product of industrial activities. The major greenhouse gases, other than water vapor, are briefly described below.[82]

Carbon Dioxide (CO_2) enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, respiration, and as a result of other chemical reactions (e.g., manufacturing of cement). Carbon dioxide is also removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

Methane (CH_4) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

Nitrous Oxide (N_2O) is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Fluorinated Gases are synthetic, strong greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases. High Global Warming Potential gases are emitted from a variety of industrial processes including aluminum production, semiconductor manufacturing, electric power transmission, and magnesium production and processing, and the production of HCFC-22, a hydrochlorofluorocarbon used as a refrigerant and in air conditioners.

5.2.5.1 *Human Influence on Climate*

The world's leading climate scientists have reached consensus that global climate change is underway, is "very likely" caused by humans, and hotter temperatures and rises in sea level "would continue for centuries," no matter how much humans control future emissions. A report of the Intergovernmental Panel on Climate Change (IPCC) - an international group of scientists and representatives concludes "The widespread warming of the atmosphere and ocean, together with ice-mass loss, support the conclusion that it is extremely unlikely that global climate change of the past

D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: http://www.ipcc.ch/ipccreports/ar4-wg1.htm

[81] Concentrations of water are highly variable in the atmosphere over time, with water occurring as vapor, cloud droplets and ice crystals. Changes in its concentration are also considered to be a result of climate feedbacks rather than a direct result of industrialization or other human activities. For this reason, water vapor is not discussed further as a greenhouse gas.

[82] U.S. EPA, 2009 U.S. Greenhouse Gas Inventory Report, http://www.epa.gov/climatechange/emissions/usinventoryreport.html (accessed April 20, 2009) and National Oceanic and Atmospheric Administration, Greenhouse Gases Frequently Asked Questions, http://lwf.ncdc.noaa.giv/oa/climate/gases.html (accessed April 22, 2009).

50 years can be explained without external forcing, and very likely that it is not due to known natural causes alone."[83]

Human activities have exerted a growing influence on some of the key factors that govern climate by changing the composition of the atmosphere and by modifying vegetation. The concentration of carbon dioxide in the atmosphere has increased from the burning of coal, oil, and natural gas for energy production and transportation and the removal of forests and woodlands around the world to provide space for agriculture and other human activities. Emissions of other greenhouse gases, such as methane and nitrous oxide, have also increased due to human activities. Carbon dioxide accounts for approximately 85 percent of total greenhouse gas emissions from human sources, and methane and nitrous oxide account for almost 14 percent. 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 the impact of nitrous oxide is 296 times that of the same amount of carbon dioxide. To account for these differences, estimates of greenhouse gas emissions are often described in terms of carbon dioxide equivalents.

In 2007, the IPCC predicted a 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.[84] Sea levels were 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 report states that the increase in hurricane and tropical cyclone strength since 1970 can likely be attributed to human-generated greenhouse gases.

On a per-person basis, greenhouse gas emissions are lower in California than most other states; however, California is a populous state and the second largest emitter of greenhouse gases in the United States and one of the largest emitters in the world.[85] Transportation is the largest source of greenhouse gas emissions in California, followed by industrial sources and electric power generation.[86]
According to the Draft 2009 Climate Action Team Report[87], the following climate change effects are predicted in California over the course of the next century:

- Warming Trends. Increasing temperatures with summer warming increasing from about 0.9 to 3.6 degrees Fahrenheit (F) in the first 30 years of the 21st century and from about 2.7 to 10.5 degrees F in the last 30 years of the 21st century.
- Precipitation. Changes in precipitation patterns and earlier melting of the Sierra snow pack that will have an effect on river flows, runoff, and water supplies in California.
- Sea-Level Rise. By 2050, sea-level rise could range from 11 to 18 inches higher and by 2100 sea-level rise could be 23 to 55 inches higher than in the year 2000. As sea level rises, major

[83] *Climate Change 2007 - The Physical Science Basis Contribution of Working Group I to the Fourth Assessment Report of the IPCC*. February 2, 2007. [http://ipcc-wg1.ucar.edu/wg1/wg1-report.html]
[84] 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. [http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf]
[85] California Legislative Analyst's Office. 2006. *Analysis of the 2006-07 Budget Bill (Governor's Climate Change Initiative).* [http://www.lao.ca.gov/analysis_2006/resources/res_04_anl06.html]
[86] California Air Resources Board. 2008. Climate Change Scoping Plan. http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm
[87] California Environmental Protection Agency. 2009. *Draft Climate Action Team Report to Governor Schwarzenegger and the Legislature*. April 1, 2009. http://www.climatechange.ca.gov/publications/cat/ (accessed April 22, 2009)

transportation infrastructure could be inundated and there also will be an increased rate of coastal flooding when high tides coincide with winter storms. Other impacts of sea-level rise include loss of coastal habitats (such as beaches and wetlands), direct impacts to coastal communities, and biodiversity reduction due to species loss.

- Agriculture. Increased challenges for the state's agricultural sector from temperature and precipitation effects on crop yields, crop losses from extreme weather events, and changes to pest and weed ranges.
- Forestry. Increased vulnerability of forests due to pest infestation, increased temperatures, wildfire frequency, and precipitation changes.
- Water Resources. Reduced reliability of State Water Project (SWP) and Central Valley Project (CVP) water supply systems due to the interaction of projected growth, a warmer-drier climate resulting in reduced streamflows and reservoir storage, and salinity increases in the Delta.
- Coastal Areas. Coastal erosion of beaches (especially during severe winter storms), and impacts to property, infrastructure, and housing due to flooding in coastal areas and the San Francisco ay area (including due to levee breaching).
- Energy. Increased electricity demand, particularly in the Central Valley, during hot summer months and possible reductions in energy generation from hydropower systems due to changes in runoff patterns.
- Air Quality. Increased concentrations of ozone and particulate matter associated with higher temperatures and increased natural biogenic emissions, which could impact air quality (particularly in the South Coast and San Joaquin air basins).
- Public Health. Effects on public health due to an increased frequency, duration and severity of heat events, increased air pollution, wildfire outbreaks, and physical events such as flooding. Air pollution and increased wildfires have the potential to increase respiratory problems.

The report concludes that extreme events from heat waves, floods, droughts, wildfires, and bad air quality are likely to become more frequent in the future in California.

5.2.5.2 *Regulatory Context for Global Climate Change*

Global climate change resulting from greenhouse gas emissions is an emerging environmental concern being raised and discussed at the international, national, and statewide level. At each level, agencies are considering strategies to control emissions of gases that contribute to global warming.[88] Regulatory efforts in California that apply to the project are summarized below.

5.2.5.3 *State of California Executive Order S-3-05*

In June 2005, the Governor of California signed Executive Order S-3-05 which identified Cal/EPA as the lead coordinating State agency for establishing climate change emission reduction targets in California. A "Climate Action Team", a multi-agency group was set up to implement Executive Order S-3-05. Under this order, the state plans to reduce greenhouse gas emissions to 80 percent below 1990 levels by 2050. Greenhouse gas emission reduction strategies and measures to reduce

[88] On April 2, 2007, the United States Supreme Court issued a 5-4 decision in Massachusetts v. EPA, which holds that the U.S. Environmental Protection Agency has authority under the Clean Air Act to regulate greenhouse gas emissions from new vehicles. The U.S. EPA has previously argued it lacked legal authority under the Clean Air Act to regulate greenhouse gases. The majority opinion of the Supreme Court decision noted that greenhouse gases meet the Clean Air Act's definition of an "air pollutant," and the EPA has the statutory authority to regulate the emission of such gases from new motor vehicles.

global warming were identified by the California Climate Action Team in 2006 and in the Climate Change Scoping Plan adopted in December 2008.[89]

5.2.5.4 *Assembly Bill (AB) 32 – The California Global Warming Solutions Act of 2006*

Subsequently, in the fall of 2006, California Assembly Bill (AB 32), the global warming bill, was signed into law. AB 32 requires the state Air Resources Board (ARB) to adopt regulations by January 1, 2008 to require reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with that program. The bill requires achievement by 2020 of a statewide greenhouse gas emissions limit equivalent to 1990 emissions, and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions.

Strategies identified by ARB to reduce greenhouse gas emissions include, but are not limited to, new vehicle emission standards, enforcement of diesel truck anti-idling requirements, capture of more methane from landfills, hydrofluorocarbon (HFC) reduction strategies for the use and disposal of refrigerants, manure management in agricultural operations, and increased use of alternative fuels.

As part of implementation of AB 32, a statewide 1990 Greenhouse Gas Emissions inventory and 2020 Emissions Limit were adopted by the ARB in 2007. ARB's mandatory reporting regulation was approved by the Board in December 2007, and became effective on December 2, 2008. Starting in 2009, facilities in several key industrial sectors, such as electricity generation, petroleum refineries and cement manufacturing, are required to report greenhouse gas emissions. The ARB also approved another key requirement of AB 32, the Climate Change Scoping Plan, on December 11, 2008. The Scoping Plan, developed by ARB with input from the Climate Action Team, proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California's economy. The ARB is currently working on additional regulations to implement the Scoping Plan. Regulations to obtain the maximum technologically feasible and cost-effective reductions in greenhouse gases are to be adopted by January 1, 2011.

5.2.5.5 *Senate Bill 97 – Modification to the Public Resources Code*

On August 24, 2007, Governor Schwarzenegger signed SB 97 which requires the Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, including, but not limited to effects associated with transportation or energy consumption. The Resources Agency is required to certify and adopt these guidelines by January 1, 2010.

Currently there is no established guidance, from the state or in published CEQA case law, for the determination of what constitutes a significant global climate change impact or what measures are necessary to off-set new greenhouse gas emissions.

At the direction of the Governor's Office of Planning and Research, ARB developed preliminary recommendations for statewide interim thresholds of significance for greenhouse gas emissions.

[89] California Environmental Protection Agency. 2006. Climate Action Team Executive Summary Climate Action Team Report to Governor Schwarzenegger and the California Legislature. [http://www.climatechange.ca.gov/climate_action_team/reports/2006-04-03_FINAL_CAT_REPORT_EXECSUMMARY.pdf] and California Air Resources Board. 2008. Climate Change Scoping Plan.

ARB focused on common project types that, collectively, are responsible for substantial greenhouse gas emissions – specifically industrial, residential, and commercial projects. These recommended approaches have not been adopted by ARB and additional workshops are not currently scheduled.

Draft CEQA Guideline Amendments for Greenhouse Gas Emissions

OPR has drafted amendments to the CEQA Guidelines for greenhouse gas emissions as required by Senate Bill 97 (SB 97). OPR held two workshops in January 2009 to present the amendments and obtain input from the public. Under the proposed CEQA Guideline amendments, changes to the CEQA Guidelines address determination of a project's incremental contribution to a cumulative effect, determining the significance of impacts from Greenhouse Gas Emissions, consistency with plans, mitigation measures related to greenhouse gas emissions, and tiering from an environmental impact report (EIR). In the proposed CEQA Guideline changes, Lead Agencies would retain discretion to establish thresholds of significance based on individual circumstances.[90]

5.2.5.6 *Senate Bill 375 – Redesigning Communities to Reduce Greenhouse Gases*

SB 375 encourages housing and transportation planning on a regional scale, in a manner designed to reduce vehicle use and associated greenhouse gas emissions. It requires the California Air Resources Board (ARB) to set regional targets for the purpose of reducing greenhouse gas emissions from passenger vehicles for 2020 and 2035. Once plans and strategies are in place to meet the SB 375 targets, certain projects in these regions can be relieved of specific review requirements of the California Environmental Quality Act. The targets apply to the regions in the State covered by the 18 metropolitan planning organizations (MPOs), including the Metropolitan Transportation Commission (MTC) in the San Francisco Bay Area. The MTC has developed the currently proposed Transportation 2035 Plan (January 2009) with the AB 32 GHG reduction targets in mind; however MTC's RTP update for 2013 would be the first MTC plan subject to SB 375.[91]

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan that sets forth a vision for growth for the region while taking into account transportation, housing, environmental, and economic needs. The SCS will be the blueprint by which the region will meet its GHG emissions reductions target if there is a feasible way to do so. The MPOs also will be required to prepare an alternative planning strategy with alternative development patterns, infrastructure, or additional transportation measures or policies to meet identified targets.

Per SB 375, the ARB appointed a Regional Targets Advisory Committee (RTAC) on January 23, 2009, to provide recommendations on factors to be considered and methodologies to be used in ARB's target setting process. The RTAC may consider any relevant issues, including, but not limited to, data needs, modeling techniques, growth forecasts, the impacts of regional jobs-housing balance on interregional travel and greenhouse gas emissions, economic and demographic trends, the magnitude of greenhouse gas reduction benefits from a variety of land use and transportation strategies, and appropriate methods to describe regional targets and to monitor performance in attaining those targets. The RTAC is required to provide its recommendations in a report to ARB by September 30, 2009. ARB must propose draft targets by June 10, 2010, and adopt final targets by September 30, 2010.[92]

[90] OPR website, CEQA Guidelines and Greenhouse Gases, http://opr.ca.gov/ (accessed April 22, 2009)
[91] MTC. 2009. Draft EIR for the Transportation 2035 Plan(Transportation in Motion 2035). January 2009. http://www.mtc.ca.gov/planning/2035_plan/EIR.htm, accessed February 18, 2009.
[92] http://www.arb.ca.gov/cc/sb375/rtac/rtac.htm, accessed February 18, 2009

5.2.5.7 *Existing City of Morgan Hill Policies, Ordinances, and Environmental Agenda*

Various policies in the City's General Plan and measures in the Municipal Code are designed to reduce energy use and promote the use of alternative modes of transportation. These measures can result in a reduction in emissions of greenhouse gases from the combustion of fuels.

General Plan Policies

Measures in the General Plan that are designed to reduce vehicle miles traveled and energy use in buildings include:

- *Level of Service Policy 1d* – Ensure Compatibility of Transportation System with Existing & Proposed Land Uses (SCJAP 11.02)
- *Bikeways Policy 8b* – Promote Walking as Alternate Transportation Mode (SCJAP 11.03)
- *Conservation Policy 7a* – Design New Development to Exceed State Standards Water & Energy Use
- *Conservation Policy 7b* – Promote Energy Conservation Techniques & Efficiency in Buildings
- *Conservation Policy 7j* – Incorporate Renewable Energy Generation in New & Existing Development
- *Conservation Action 7.5* – Emphasize Energy Conservation Building Techniques for New Residential Construction (MHMC Chapter 18.78)

Morgan Hill Municipal Code

The City of Morgan Hill Municipal Code also includes requirements for energy and water conservation for new and existing development within the City. These measures include the Water Conserving Landscapes Ordinance adopted in February 2006. This ordinance regulates landscape design, construction, and maintenance. It promotes efficient water use and management of peak season water demands. The Morgan Hill Municipal Code requires all buildings to conform to the energy conservation requirements of California Administrative Code Title 24

City of Morgan Hill Environmental Agenda

In 2007, the City Council adopted an Environmental Agenda to enhance the long-term sustainability of Morgan Hill by reducing environmental impacts, increasing community health, and protecting environmental resources for future generations. Progress on environmental goals is assessed on a yearly basis.

To promote and provide opportunities for residents to reduce GHG emissions, the City of Morgan Hill has taken the following steps:

- Posting a carbon calculator on the City's website that is specifically designed for Morgan Hill residents to help conceptualize their contribution to global warming and to provide strategies for reducing emissions;
- Promoting bicycling and walking to City of Morgan Hill events through giveaways;
- Requiring green building checklists to be filled out with building permits, and updating residential development control system criteria to strengthen green building incentives;

http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080930_chaptered.pdf , accessed February 18, 2009

- Researching programs that would allow residents to purchase local carbon offsets that would directly benefit the community;
- Implementing programs to reduce the cost of installing solar systems;
- Arranging free bus service for VTA community bus routes 15 and 16 on Earth Day;
- Providing educational material with utility bills; and
- Drafting a proposed Sustainable Buildings ordinance that will be considered for adoption in 2009, which would establish "green building" requirements for both residential and non-residential development.

5.2.5.8 *Existing Baseline Emissions*

Under existing conditions, the Specific Plan project area is developed with a mix of residential, commercial, industrial, and public/quasi-public uses such as a community center, churches, and a school. Approximately one-third of residences in the Specific Plan project area are single family density. Like the remainder of the City of Morgan Hill, the primary greenhouse gas emissions from human activities are associated with transportation (motor vehicles) followed by emissions from natural gas use and electricity generation.[93] A relatively small amount of greenhouse gas emissions are generated by the breakdown of solid waste generated in the City.

5.2.5.9 *Global Climate Change Impacts*

Given the global scope of global climate change and the large quantity of greenhouse gas emissions, the challenge under CEQA is for a Lead Agency to present information on the possible impacts of a project on global warming in a way that is meaningful to the decision making process. Under CEQA, there are two essential questions: would a project increase or substantially contribute to an environmental impact *or* would the project be subject to impacts from the environment associated with global climate change.

Since projects can both contribute to global climate change and be exposed to impacts from global climate change, mitigation measures should be identified to minimize project impacts to and from global climate change.

Thresholds of Significance

Under State Senate Bill (SB) 97 (August 2007), the State Office of Planning and Research is to certify and adopt guidelines for evaluation of the effects of greenhouse gas emissions and mitigation of those effects by January 1, 2010. Neither CEQA nor the CEQA Guidelines currently provide any methodology for analysis of greenhouse gases. Absent established standards for gauging the significance of greenhouse gas emissions, a primarily qualitative approach will be used to evaluate possible impacts for this project.

For the purposes of this EIR, a global climate change impact would be significant if the project would:

- Result in substantial new greenhouse gas emissions; or
- Be substantially affected by global climate change.

[93] City of Morgan Hill Carbon Footprint Summary, written communications, July 1, 2008.

At this time, for a project to be a substantial source of new greenhouse gas emissions it would have to meet the following criteria:

- Result in a net increase in greenhouse gas emissions, in terms of carbon dioxide equivalents, that could substantially impede local, regional or statewide efforts to reduce overall greenhouse gas emissions to 1990 levels.

5.2.5.10 *Impacts from the Project (Changes in Emissions of Greenhouse Gases)*

The proposed project would allow development of vacant land and redevelopment of the central area of Morgan Hill, generally with more intense uses (more dwelling units, more building area, etc.). The primary sources of greenhouse gas emissions from implementation of the proposed project are anticipated to be combustion of fossil fuels for vehicle trips to and from the area; from grid-delivered electricity for lighting, appliances, and building cooling; and from building heating with natural gas. Electricity would also be used to pump potable water to the Specific Plan project area, and energy will be consumed treating sewage generated by the new development.

Currently, there is not one model capable of estimating all of a project's direct and indirect greenhouse gas emissions.[94] One model, the URBEMIS 2007 model (Version 9.2) can estimate vehicle miles traveled for a particular project and the carbon dioxide emissions from transportation and other land use factors (e.g., combustion products for on-site heating); however, it does not estimate other energy use or greenhouse emissions from the generation of electricity for lighting, cooling, pumping water or other uses.

For the purpose of this EIR, the significance of emissions of greenhouse gases will be evaluated based on a qualitative discussion of estimated net new greenhouse gas emissions and measures included in the project to reduce greenhouse gas emissions. The consistency of the proposed project with strategies for reducing future greenhouse gas emissions identified in the Climate Change Scoping Plan by ARB in 2008. For transportation, an estimate of net emissions under the proposed project was made using the URBEMIS 2007 model, based on the conservative estimate of buildout for the Specific Plan by 2030 that assumes a higher redevelopment rate for the planned uses. An estimate of possible greenhouse gas emissions from electricity use was also made based upon the coefficient used by the City of Morgan Hill ICLEI (Local Governments for Sustainability) model used to estimate Morgan Hill's community carbon dioxide emissions. Emissions associated with water use are also similarly estimated.

The following discussion is a good faith effort at estimating possible greenhouse gas emissions from transportation and electricity use.

Mobile Emissions

Emissions of air pollutants associated with projected levels of development by 2030 were predicted using the URBEMIS2007 model (Version 9.2), distributed by the California Air Resources Board and recommended for use by the BAAQMD. This model predicts daily emissions associated with land use developments. The model combines predicted daily traffic activity, associated with the residential, office, and retail land use types, with emission factors from the State's mobile emission factor model (i.e., EMFAC2007). The net new VMT associated with implementation of the Specific Plan are approximately 98,381 miles per year in 2030 (refer to Appendix E). Based on the carbon

[94] Source: California Air Pollution Control Officers Association. 2008. *CEQA & Climate Change, Evaluating and addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.*

dioxide emission rate assumptions in the model, the net new carbon dioxide vehicle emissions would be approximately 17,081 tons of carbon dioxide in 2030 from vehicle emissions.

Area Source Emissions

Area source emissions, in the form of natural gas combustion for heating and cooking, fireplace use, and landscape equipment were calculated. Based on URBEMIS 2007 modeling data, the project would result in annual emissions of 2,660.2 tons of carbon dioxide.

Indirect Source Emissions

Indirect source emissions are those that are associated with the generation of electricity provided to the project for lighting, appliances, water service and building cooling.

Electricity Use

As discussed in *Section 3.13 Energy*, the future project would result in an increase in electricity use of approximately 10,506,008 kWh/year in 2030. This is a conservative estimate as limited energy conservation measures are assumed in this estimate. The generation of electricity through the combustion of fossil fuels (such as natural gas) yields carbon dioxide, as well as smaller amounts nitrous oxide and methane.

Using the coefficient for the Morgan Hill ICLEI model of 0.5 pounds of carbon dioxide per kWH per year it is estimated new development in the proposed Specific Plan project area would emit approximately 2,626.5 additional tons of carbon dioxide a year by 2030. Approximately 1,585.9 tons of carbon dioxide would be generated from new development in the Specific Plan project area by 2015.

Water Use

As discussed in *Section 3.6 Hydrology and Water Quality*, the project would result in additional water usage of 495 acre-feet per year. Using the Morgan Hill Carbon Emissions Estimator, it is estimated that project development in the Specific Plan project area would result in water use of 17,972 units per month by 2030.[95] Approximately 182.3 tons of carbon dioxide would be emitted annually by electricity generation associated with this water use.

Solid Waste

As discussed in *Section 3.8 Utilities and Service Systems*, the proposed project is estimated to generate approximately 1,696.3 tons of solid waste per year. The composition of these materials is unknown at this time; however, based on statewide average organic material ratio of residential and business solid waste,[96] the project would generate approximately 109 metric tons[97] of carbon dioxide equivalents per year from the decomposition of organic solid waste.

[95] The City's Carbon Emissions Estimator assumes one unit of water is equivalent to 748 gallons.
[96] California Integrated Waste Management Board. Jurisdiction Waste Profile for City of Morgan Hill. 2009. http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID=325&JUR=Morgan+Hill Accessed: July 20, 2009.
[97] Estimated using emissions factors for food scraps in the U.S. EPA WARM model. The U.S. EPA created the Waste Reduction Model (WARM) to help solid waste planners and organizations track and voluntarily report greenhouse gas emissions reductions from several different waste management practices. http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html Accessed: July 20, 2009.

Strategies to Reduce Greenhouse Gas Emissions

Through the features listed above, the proposed Specific Plan project will implement several of the recommended actions for greenhouse gas (GHG) reductions in the Air Resources Board's adopted Climate Change Scoping Plan.

- Water Use Efficiency – To reduce the amount of electricity, natural gas, and diesel used to convey, treat, and distribute water, future projects would use efficient water management practices and conserve water needed for landscaping, as required under the City of Morgan Hill Municipal Code.
- Transportation Greenhouse Gas Emissions – The Specific Plan project area is located near multi-modal transit, includes elements to improve bicycle and pedestrian facilities and create a pedestrian friendly downtown area. It includes a relatively dense mix of uses that would locate jobs and residences near transit. It would tend to slow the growth rate of vehicle miles traveled and reliance on petroleum fuels.

5.2.5.6 *Mitigation and Avoidance Measures Included in the Project to Reduce GHG Emissions*

As discussed above, the Specific Plan by design would reduce vehicle miles traveled per capita in Morgan Hill by placing additional jobs and housing near transit, allow for mixed use projects with residential multiple family units above that would tend to reduce energy and water use per dwelling unit compared to single family residential types, and includes street improvements to create a more pedestrian-friendly Downtown. Several mitigation and avoidance measures previously described in this EIR would also reduce greenhouse gas emissions from transportation, building, and/or solid waste sectors. These measures include:

MM AQ-2.1: The Specific Plan shall be amended to require submission of an Air Quality and Transportation Demand Management (AQ-TDM) Plan as part of the Design Permit (Architectural and Site Review) application for review and approval by the Community Development Director. The AQ-TDM Plan will incorporate appropriate measures, at appropriate locations as determined through the design permit process, such as the following, to reduce air quality impacts:

- Provide bicycle lanes, sidewalks and/or paths, connecting project residences to adjacent schools, parks, the nearest transit stop and nearby commercial areas.
- Provide secure and conveniently placed bicycle parking and storage facilities at parks and other facilities.
- Allow only natural gas fireplaces. No wood burning devices would be allowed.
- Construct transit amenities such as bus turnouts/bus bulbs, benches, shelters, etc.
- Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.
- Provide showers and lockers for employees bicycling or walking to work.
- Provide transit information kiosks and bicycle parking at commercial facilities.

- Provide secure and conveniently located bicycle parking and storage for workers and patrons.

MM AQ-2.2: Public parking lots constructed or assisted by the City or Redevelopment Agency of Morgan Hill and private residential parking facilities of 50 spaces or more shall include the following amenities:

- Electric vehicle charging facilities.
- Preferential parking for Low Emission Vehicles (LEVs).

SM BIO-6: Prior to the removal of any tree or community of trees on any city or private property in the Specific Plan project area a tree removal permit would be required from the Community Development Director which would include a description of the tree replacement program and identify any additional conditions imposed by the City. Alternatively, the City's ordinance section 12.32.070(B) allows the Community Development Director to grant a tree cutting permit where utilization of the property is of greater public value than the environmental degradation caused by the action. Tree removal may also occur without a permit if the removal will take place in accordance with an approved landscape plan. [MHMC 12.32.030, 12.32.040, 12.32.060]

AM ENER-1.1: In accordance with the provisions of Morgan Hill Municipal Code Chapter 18.78.28, development should be required to meet a minimum point standard for energy conservation (i.e. *GreenPoint Rated, LEED*). Development proposed under the Specific Plan should provide for energy conservation through the use of energy-efficient building techniques, materials, and appliances, such that the buildings consume less energy than allowed by California's Title 24 Building Energy Efficiency Standards, which could be documented in the energy compliance reports submitted at the time of application for building permits.

AM ENER-1.2: Development and demolition activities proposed under the Specific Plan should have a waste management plan for recycling of construction and demolition materials in place and operating from project inception. Prior to the issuance of building permits, the City will review the plan. The plan would be completed to the satisfaction of the Community Development Director, Building Official, or Environmental Coordinator.

AM ENER-1.3: Development proposed under the Specific Plan should recycle or salvage a minimum of 50 percent (by weight) of construction, demolition, and land clearing waste. The projected quantities of waste generated during demolition and construction, how much of those materials would be reused, recycled, or otherwise diverted from landfills, and where unrecycled materials would be disposed of should be included in the waste management plan prepared for proposed development. Upon completion, the project applicant would provide the City with a report summarizing the waste type, quantity, disposition (e.g., recycled or landfilled) and facility used, to document execution of the plan.

AM ENER-1.4: Development proposed under the Specific Plan should, to the extent feasible, incorporate principles of passive solar design to the satisfaction of the Community Development Director. Passive solar design is the technology of heating, cooling, and lighting a building naturally with sunlight rather than with mechanical systems because the building itself is the system. Basic design principles include large south-facing windows with proper overhangs, as well as tile, brick, or other thermal mass material used in flooring or walls to store the sun's heat during the day and release it back into the building at night or when the temperature drops. Passive solar also takes advantage of energy efficient materials, improved insulation, airtight construction, natural landscaping, and proper building orientation to take advantage of the sun, shade, and wind. Prior to issuance of building permits, the approved plans should demonstrate how and where these principles are incorporated to the satisfaction of the Community Development Director.

AM ENER-1.5: The idling of construction vehicles shall be avoided to reduce fuel consumption, emissions, and noise.

AM ENER-1.6: Development proposed under the Specific Plan should, to the extent feasible, incorporate standards for cool roofs outlined in Build It Green's (BIG) Greenpoint rating system for residential development and the LEED rating system for commercial development.

AM ENER-1.7: Development proposed under the Specific Plan should be constructed to meet the requirements of the U.S. Green Building Council's Leadership in Energy and Design (LEED) for new commercial development and Build It Green's (BIG) Greenpoint rating system for new residential development. In particular, the development should meet the minimum points required in the energy category of both checklists.

AM ENER-1.8: Development proposed under the Specific Plan should, to the extent feasible, include photovoltaic (i.e., solar electric) systems on rooftops. An average-sized residential system (2.5 kW) in California produces in excess of 4,000 kWh annually, which equates to 62% of the average electricity demand per residential unit. Commercial systems are generally larger than residential systems and produce commensurately more electricity. (Each square foot of photovoltaic cells produces approximately 10 watts of power in bright sunlight.)

AM ENER-1.9: Development proposed under the Specific Plan should incorporate solar hot water heating systems, to the extent feasible, to reduce energy use.

Impact C-GCC-1: Due to the location of Specific Plan project area near transit, measures included in the project to make the Downtown more pedestrian-friendly, and the types and intensity of allowed development, the Specific Plan would be consistent with strategies to reduce Vehicle Miles Traveled per capita over time. While the project would result in a net increase in greenhouse gas emissions, in terms of carbon dioxide equivalents, it would not substantially impede local, regional or statewide efforts to reduce overall greenhouse gas emissions to 1990 levels. (**Less Than Significant Cumulative Impact)**

5.2.5.7 *Impacts to the Project from Global Climate Change*

As noted previously, climate change effects expected in California over the next century could include reduced water supply, impacts from sea level rise, and increased electricity demand, particularly in the hot summer months.

Impacts to the project from global climate change could include reduced water availability due to droughts. Water would be used for potable water supplies, sanitary plumbing, and landscape use. At this time, based on recent case law, neither the State Department of Water Resources nor the Santa Clara Valley Water District has established the effects of global climate change on water supplies in California or locally.[98]

The Specific Plan project area is located over 25 miles from San Francisco Bay and is not within possible inundation areas from an up to three meter (approximately 10 feet) rise in sea level. The Specific Plan project area is also located over 18 miles from the Monterey Bay and is not within its possible inundation area from sea level rise. The project, therefore, would not be directly impacted by sea level rise.

The intensity and/or frequency of wildfires at the urban/wildland interface, including near Nob Hill could increase with climate changes. This could have both environmental and economic impacts, in terms of fire suppression costs.

Energy use in the Downtown could rise during the hot summer months because energy use for building cooling would increase. In the event regional demand exceeded supply, this could result in temporary interruptions in power supply. This could impact young children and the elderly in residential uses and otherwise would primarily be an economic rather than an environmental impact and, therefore, is not discussed further.

Impact C-GCC-2: Downtown Morgan Hill is located more than 25 miles from San Francisco Bay and more than 18 miles from Monterey Bay and would not be directly impacted by predicted sea level rise. **(Less Than Significant Cumulative Impact)**

5.2.5.8 *Conclusions Regarding Cumulative Global Climate Change Impacts*

Impact C-GCC-1: Due to the location of Specific Plan project area near transit, measures included in the project to make the Downtown more pedestrian-friendly, and the types and intensity of allowed development, the Specific Plan would be consistent with strategies to reduce Vehicle Miles Traveled per capita over time. While the project would result in a net increase in greenhouse gas emissions, in terms of carbon dioxide equivalents, it would not substantially impede local, regional or statewide efforts to reduce overall greenhouse gas emissions to 1990 levels. (**Less Than Significant Cumulative Impact)**

Impact C-GCC-2: Downtown Morgan Hill is located more than 25 miles from San Francisco Bay and would not be directly impacted by predicted sea level rise. **(Less Than Significant Cumulative Impact)**

[98] Santa Clarita Oaks Conservancy, et al v. City of Santa Clarita, et al., Los Angeles Superior Court Case No. BS084677 August 15, 2007.

5.2.6 Cumulative Geology and Seismicity Impacts

Construction of the pending projects would result in exposure of additional residents to the earthquake hazards of the region. Other geologic conditions in Morgan Hill that could damage buildings and pavement include the presence of expansive and liquefiable soils and landslide and lateral spreading hazards. The proposed Downtown Specific Plan project is not subject to substantial liquefaction or landslide hazards and would not contribute to increased exposure to these hazards.

Individual developments will be subject to project review and permitting. The design and construction of future projects in conformance with Seismic Zone 4 criteria in the California Building Code and standard engineering practice would reduce geology, soils, and seismicity impacts to a less than significant level. Project-specific geologic analysis will be conducted, as required, as a part of the individual permit processes to determine the design and construction features needed to reduce geologic and seismic impacts. Through these standard measures, the proposed project and cumulative development will not result in cumulative geologic or seismic hazard impacts**.**

Impact C-GEO-1: Implementation of standard engineering and design measures as required by the City of Morgan Hill would reduce possible cumulative geologic and seismic hazards to a less than significant level. **(Less Than Significant Cumulative Impact)**

5.2.7 Cumulative Hydrology and Water Quality Impacts

5.2.7.1 *Flooding and Drainage Impacts*

Projected development by 2030 in Morgan Hill, including portions of the proposed Specific Plan project area and two of the pending GPAs (3 and 4) are located within a 100-year flood zone. Future development located within the 100-year flood zone will be required to conform to the City's Floodplain Ordinance. In addition, new development will be required to conform to standard conditions and requirements in the Morgan Hill Municipal Code adopted for the purpose of avoiding flooding impacts due to increased runoff. Through these standard measures, the City would ensure that development within the City does not increase stormwater runoff such that it would exceed the capacity of planned stormwater drainage facilities and cause flooding.

Impact C-HYDRO-1: Implementation of standard measures for stormwater runoff by the City of Morgan Hill and conformance with the City's Floodplain Ordinance would avoid significant impacts from flooding. **(Less Than Significant Cumulative Impact)**

5.2.7.2 *Water Quality Impacts*

Future development in Morgan Hill through 2030, including development allowed under the proposed Specific Plan, would result in cumulative increases in short-term erosion and sedimentation. Development and redevelopment could also increase long-term non-point source pollution in stormwater runoff from the various sites. The implementation of Best Management Practices (BMPs), such as stormwater inlet protection and use of straw wattles in construction areas, would minimize sedimentation of surface water during construction. Each of the pending projects will be subject to individual review and permit requirements of the NPDES General Construction Program and standard requirements of the City of Morgan Hill, including requirements to implement BMPs to control pollutants discharged to surface waters and the storm drainage system. Through

these individual actions required by the City of all approved new development, cumulative impacts to stormwater quality would be reduced to a less than significant level.

Impact C-HYDRO-2: Implementation of permit requirements of the NPDES General Construction Program and standard requirements placed by the City of Morgan Hill on all new development will reduce cumulative water quality impacts from proposed development to a less than significant level. **(Less Than Significant Cumulative Impact)**

5.2.7.3 *Conclusions Regarding Cumulative Hydrology and Water Quality Impacts*

Impact C-HYDRO-1: Implementation of standard measures for stormwater runoff by the City of Morgan Hill and conformance with the City's Floodplain Ordinance would avoid significant impacts from flooding. **(Less Than Significant Cumulative Impact)**

Impact C-HYDRO-2: Implementation of permit requirements of the NPDES General Construction Program and standard requirements of the City of Morgan Hill will reduce cumulative water quality impacts from cumulative development to a less than significant level. **(Less Than Significant Cumulative Impact)**

5.2.8 Cumulative Hazards and Hazardous Materials Impacts

Proposed development in Morgan Hill through 2030, including on parcels in the Specific Plan project area and proposed on General Plan Amendment parcels, would construct urban land uses on properties previously used for agricultural production. At several locations, hazardous materials may also have been stored and used on individual project sites. Hazardous materials (such as gasoline, oil, diesel and various agricultural chemicals) may have been stored on some of these sites in above-ground or underground tanks. Storage tanks can leak, often resulting in soil and/or groundwater contamination. The use of pesticides and fertilizers on agricultural properties can result in residual soil contamination, sometimes in concentrations that exceed regulatory or screening thresholds.

In addition, development/redevelopment on some sites would require demolition of existing buildings that may contain asbestos-containing building materials and/or lead paint. Demolition of these structures could expose construction workers or other persons in the vicinity to harmful levels of asbestos or lead.

Due to the risks associated with exposure to hazardous materials for each of the cumulative projects, various mitigation measures may be implemented as a condition of future development. The Morgan Hill General Plan Hazardous Materials Policy 3t calls for providing mitigation to remedy the effects of new or expanding development over areas with environmental contamination of any and all unauthorized discharges. Mitigation measures would include incorporating the requirements of existing local, state, and federal laws and regulations and oversight by agencies such as the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, the California Department of Toxic Substances Control, or Cal/OSHA during all phases of project construction. Depending upon the extent of a chemical or fuel release, contaminated soils could be excavated and transported to appropriate landfills, or treated on-site. If groundwater is affected, remediation and on-going groundwater sampling both on the site and on surrounding downgradient properties could be warranted. Finally, determining the extent of asbestos and lead paint contamination would also be required prior to building demolition and site grading and, if present,

such substances will be handled and disposed of in a manner that minimizes human exposure, consistent with state and federal law.

For sites with hazardous materials contamination, implementation of mitigation and avoidance measures, such as those described above, would be required on a project-by-project basis to avoid or reduce hazardous materials impacts to a less than significant level.

In the City of Morgan Hill, elevated risks of wildland fire hazards have been identified and mapped primarily in foothill areas by Cal Fire. Future projects in moderate to severe fire hazards zones would be required to incorporate measures to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire. Development proposed on parcels located within a fire hazard severity zone or wildland-urban interface area would be reviewed by the Santa Clara County Fire Department to ensure that the proposed building materials and assemblies provide a reasonable level of exterior wildfire exposure protection.

Cumulative projects would be required to conform to local, state and federal laws and regulations and policies of the City of Morgan Hill for mitigation of hazards and hazardous materials impacts. With the implementation of the various program and regulatory measures identified above, the cumulative projects considered in this analysis would not result in individual significant unmitigated cumulative hazards and hazardous materials impacts and the proposed project would not make a cumulatively considerable contribution towards a significant cumulative impact.

Impact C-HM-1: Cumulative projects are anticipated to include mitigation and avoidance measures to avoid or reduce possible hazards and hazardous materials impacts. The proposed project includes measures to avoid or reduce possible hazards and hazardous materials impacts and would not contribute to a significant cumulative hazards and hazardous materials impact. **(Less Than Significant Cumulative Impact)**

5.2.9 Cumulative Utilities Impacts

Approval and implementation of the proposed project and the General Plan Amendments listed in Table 5.1-1, in conjunction with continued development under the City's current General Plan, would result in substantial new industrial, commercial and residential development. The City of Morgan Hill and the South County Regional Wastewater Authority, as utility and service providers, maintain long term projections for demand for their utility services within the City based on the General Plan and RDCS program and have developed strategies and plans to meet anticipated demand levels.

For the purposes of this EIR, a cumulative impact to utilities would be considered significant if projected development through 2030 would exceed the current or feasible future capacity of the water, wastewater, stormwater, or solid waste facilities that serve the Morgan Hill area.

As discussed in *Section 3.8 Utilities and Service Systems*, the City of Morgan Hill provides potable water, stormwater drainage, and sewer services. It has an Urban Water Management Plan that addresses projected water demand in the City. According to the 2005 Urban Water Management Plan and a Water Supply Assessment prepared for the project, the City will have adequate water supply for planned and estimated growth (based on the RDCS) with the implementation of the City's water conservation programs.

The Morgan Hill Municipal Code (MHMC) requires that grading and drainage plans illustrating existing topography, proposed cuts and fills, sedimentation and erosion-control measures and structures, the direction of all site drainage, and all structural drainage facilities, shall be submitted as a part of architectural and site review (MHMC 18.74.330). The City also requires on-site detention facilities designed to a 25-year storm capacity and on-site retention facilities designed to a 100-year storm capacity to avoid flooding impacts due to increased runoff. Off-site detention and retention facilities may also be proposed and are subject to the approval of the Director of Public Works. By requiring that all new development be consistent with this ordinance, the City ensures that development within the City does not increase stormwater runoff such that it would not exceed the capacity of planned stormwater drainage facilities.

Similarly, with implementation of the RDCS program, population growth is planned and is taken under consideration in planned expansions of the capacity of the wastewater treatment plant and the City's sanitary sewer system. Development in the City of Morgan Hill primarily consists of development and redevelopment of sites within the City's Urban Service Area served by existing infrastructure, with some intensification of uses. Voter-approved General Plan policies and the Residential Development Control System ordinance limit expansion of the Urban Service Area (USA) boundary in order to prevent premature extension and expansion of urban services. For these reasons, cumulative development and redevelopment is not anticipated to require the construction of new water supply or wastewater treatment facilities beyond that already planned for by the City of Morgan Hill.

Solid waste from existing and future development in Morgan Hill would be collected and either recycled or disposed of at the Johnson Canyon Sanitary Landfill by the City's solid waste service provider. Cumulative development would be served by a landfill with adequate capacity through approximately 2040.

Impact C-UTIL-1: Redevelopment in the Specific Plan project area, along with other General Plan Amendments and projected development through 2030, is not anticipated to exceed available water supplies, stormwater system capacity, planned sanitary sewer, and wastewater treatment plant capacity or solid waste recycling and disposal system capacity. Cumulative development is not anticipated to require the construction of new water supply or wastewater treatment facilities beyond that already planned for by the City of Morgan Hill. **(Less Than Significant Cumulative Impact)**

5.2.10 Cumulative Cultural Resources Impacts

Consistent with the thresholds used by the City in evaluating project-specific cultural resource impacts and with the definitions in CEQA, a significant cumulative impact to cultural resources would occur if approval of two or more of the cumulative projects would cause a substantial adverse change in the significance of a historic resource or archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, or disturb any human remains, including those interred outside of formal cemeteries.

5.2.10.1 *Impacts to Archaeological Resources*

The entire City of Morgan Hill has a potential for containing subsurface prehistoric archaeological resources, particularly near the natural channels of Coyote Creek, Fisher Creek, and the various branches of Llagas Creek. There also is the potential to encounter buried historic period resources in

the vicinity of historic homesteads. While much of cumulative project area has already undergone some type of development (e.g., with urban or agricultural uses), impacts to subsurface cultural resources could still occur during ground disturbing activities, including excavation for future development.

The City of Morgan Hill archaeological resources sensitivity map shows sensitive cultural areas along West Little Llagas Creek, which extends through the Specific Plan project area west of Monterey Road and cumulative Projects 3 and 4.

As described in *Section 3.9.2.2 Impacts to Archaeological Resources*, in accordance with City of Morgan Hill standards and practices, future development in the City would be required to follow City policies and procedures and state law for the treatment and disposition of inadvertently discovered human remains or archaeological materials.

Impact C-CULT-1: Projected development under the existing General Plan through 2030 would be required to conform to state law and City of Morgan Hill regulations and policies for mitigation and avoidance of impacts to archaeological resources. With implementation of these measures, the cumulative projects would not result in a significant cumulative impact to archaeological resources. **(Less Than Significant Cumulative Impact)**

5.2.10.2 *Impacts to Historical Resources*

The City has an inventory of properties having possible historic significance, and has designated 23 of those as historical resources.[99] There are historic resources within the Specific Plan project area, but no known extant historic resources or historic districts on the proposed General Plan Amendments sites listed in Table 5.1-1; however, projected development by 2030 under the existing General Plan could result in impacts to historic resources.

General Plan policies on historic resources strongly encourage the protection of significant historic structures and heritage resources. As described in *Section 3.9.2.3 Impacts to Historic Resources,* the Morgan Hill Municipal Code requires permit approval for any project that would tear down, demolish, remove, relocate, alter or modify character-defining features of a potentially significant or significant historical resource, a resource that has been formally designated or listed on the city's adopted survey list, or which lies within an historic district.

Impacts to historic structures or objects in the Downtown are assumed to be avoided through the implementation of measures such as rehabilitation in conformance with Secretary of Interior Standards. The combined impacts to historic resources as a result of implementation of projected development under the existing General Plan through 2030 is not anticipated to result in a cumulatively significant loss of historic resources.

Impact C-CULT-2: The combined impacts to historic resources as a result of the proposed cumulative General Plan Amendments and projected development under the existing General Plan through 2030 is not anticipated to result in a cumulatively significant loss of historic resources. **(Less Than Significant Cumulative Impact)**

[99] The Morgan Hill House (Villa Miramonte) is the only City Designated Historic Resource that is also listed on National Register of Historic Resources. Historic resources placed on the City's Adopted Survey List and/or Local Register are considered "Presumptive Historical Resources" under CEQA.

5.2.10.3 *Conclusions Regarding Impacts to Cultural Resources*

Impact C-CULT-1: Projected development under the existing General Plan through 2030 would be required to conform to state law and City of Morgan Hill regulations and policies for mitigation and avoidance of impacts to archaeological resources. With implementation of these measures, the cumulative projects would not result in a significant cumulative impact to archaeological resources. **(Less Than Significant Impact)**

Impact C-CULT-2: The combined impacts to historic resources as a result of the proposed cumulative General Plan Amendments and projected development under the existing General Plan through 2030 is not anticipated to result in a cumulatively significant loss of historic resources. **(Less Than Significant Cumulative Impact)**

5.2.11 Cumulative Biological Resources Impacts

The proposed project is located in urbanized central Morgan Hill. While some of the other pending General Plan Amendments and projected development through 2030 under the existing General Plan are located on the urban edge and could conceivably impact sensitive biological resources, redevelopment in the Downtown would have little cumulative effect on existing sensitive resources or special status plant or animal species. The proposed project would not be expected to substantially impact biological resources in the long-term above what is already occurring as a result of existing conditions. Common, urban wildlife species would still be able to move through or occupy the area, much as they do today.

Like the proposed project, several of the proposed General Plan Amendments as well as projected development through 2030 under the existing General Plan could result in impacts to individual burrowing owls or nesting birds during construction. It is assumed that all future development in Morgan Hill will include measures to avoid impacts to individual nesting birds and burrowing owls in conformance with the Migratory Bird Treaty Act and the City of Morgan Hill Burrowing Owl Mitigation Program (or the Santa Clara Valley Habitat Conservation Plan if and when it is adopted and in effect in the City of Morgan Hill).

Impact C-BIO-1: The project would not make a cumulatively considerable contribution to possible cumulative impacts to sensitive biological habitats. **(Less Than Significant Cumulative Impact)**

5.2.12 Cumulative Visual and Aesthetic Impacts

None of the proposed cumulative General Plan Amendments are located on visually prominent ridgelines or would substantially block views of scenic areas from public vantage points. The City's General Plan includes policies and actions to preserve El Toro Mountain in open space and other scenic hillsides in an undeveloped state.

Construction on the cumulative General Plan Amendment sites listed in Table 5.1-1, along with development and redevelopment allowed in the Specific Plan project area and under the City's General Plan, could result in changes in the visual character of areas within the City of Morgan Hill. Previously approved projects and pending projects are subject to the City's design standards and architectural review process. Cumulative development through 2030 under the existing General Plan

would not substantially degrade the existing visual character or quality of the City and surrounding neighborhoods if future development is determined to be consistent with the City's design standards during the Architectural Review process.

Impact C-VIS-1: Implementation of design standards, as determined during the City's Design Review process, will avoid substantial cumulative impacts to visual resources in developed areas of Morgan Hill. **(Less Than Significant Cumulative Impact)**

5.2.13 Cumulative Energy Impacts

The final design of subsequent projects allowed under the Specific Plan, and other major projects in the City of Morgan, will be reviewed through the City's design review process under Chapter 18.74 of the Municipal Code. One of the considerations in this design review would be ensure that projects conform to existing Building Code requirements and avoid the wasteful use of energy. In addition, though the City's Environmental Agenda, programs to reduce energy use will continue to be implemented.

Impact C-ENER-1: The Specific Plan, and other projected development in the City of Morgan Hill through 2030, are not anticipated to use energy in a wasteful manner, exceed the planned capacity of local energy infrastructure or otherwise result in substantial cumulative energy impacts. **(Less Than Significant Cumulative Impact)**

5.2.14 Cumulative Public Facilities and Services Impacts

Public facilities and services, such as fire and police, parks, libraries, and schools, are provided to the community as a whole at defined locations and the resource base for delivery of these services is financed on a community-wide basis. In Morgan Hill, these services are provided by the City and County of Santa Clara.

New development usually creates an incremental increase in the demand for these services with the amount of demand varying widely between development types (e.g., residential versus commercial), the type of services and the specific characteristics of the development (such as student generation by multiple family residences versus senior housing).

The cumulative impact of a group of projects on public facility services is generally a fiscal impact. Cumulative development can cause an increase in the cost of providing service (for example more personnel hours for police patrols or park maintenance). These are fiscal impacts, not environmental impacts. An analysis of fiscal impacts is not required under CEQA.

CEQA analysis is required if the increased cumulative demand is of sufficient size to trigger the need for a new facility (such as a school or fire station) since construction of the new facility would have a physical impact on the environment. CEQA requires that an EIR then identify and evaluate the physical impacts on the environment that such a facility would have.

5.2.14.1 *Police and Fire Services Impacts*

Although the cumulative development under the General Plan through 2030 with the Specific Plan and pending General Plan Amendments would increase the number of residents and employees in the

City, construction of new police department facilities is not anticipated. As noted in *Section 3.13*, construction of a new fire station on Butterfield Boulevard is planned, independent of the proposed Specific Plan and General Plan Amendments. The City of Morgan Hill collects impact fees to ensure that funds are available for planned facility and equipment needs.

5.2.14.2 *School Impacts*

The proposed project and pending General Plan Amendments could increase the students enrolled in the Morgan Hill Unified School District (MHUSD) from what is projected under the existing General Plan through 2030. Residential development through 2020 would continue to be limited to the 48,000 population cap required under the RDCS process.

As described in *Section 3.13.3.4*, State Law (Government Code Section 65996) specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is payment of a school impact fee prior to issuance of a building permit. The school impact fees implementation of measures specified in Government Code 65996 would be used to offset project-related increases in student enrollment. Residential development proposed under the Specific Plan and other pending cumulative projects would be required to comply with the school impact fee requirements of the Morgan Hill Unified School District.

The City of Morgan Hill prepares quarterly reports of RDCS residential development (as well as quarterly reports of non-residential development), which report on the progress toward completion of allotted and approved development projects. The Morgan Hill Unified School District will continue to receive and can review these reports to ensure that planning to accommodate students generated from developments is done at appropriate times, and appropriate measures taken.

5.14.2.3 *Parkland Impacts*

The City of Morgan Hill has an established benchmark for parks. The City's General Plan has a parks and recreation goal to provide useful, accessible and high-quality park, recreation and trail facilities and programs. Morgan Hill's recommended standard for parkland is five acres per 1,000 residents; however, the Municipal Code requires three acres of parkland per 1,000 residents in accordance with State law governing maximum requirements on development. Morgan Hill's current population is 39,218[100] and is projected to grow to 48,000 by the year 2020.[101] Based on the current Draft Capital Improvements Program (CIP), the City will purchase 40 acres of parkland in summer 2009 and the City will own a total of approximately 213 acres of parkland by the end of 2011 to serve an estimated population of 41,391.[102] This exceeds the City's goal of five acres of parkland per 1,000 capita. A total of 27 acres of additional parkland will be needed to achieve the General Plan goal by 2020. The City projects a population of 55,396 residents under the existing General Plan by 2030 that would result in the need for approximately 277 acres of parkland to meet the City's goal. The City would need an additional 64 acres of parkland in addition what is currently planned to meet the General Plan in 2030.

[100] State of California, Department of Finance. E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2008, with 2000 Benchmark. Sacramento, California, May 2008. http://www.dof.ca.gov/research/demographic/reports/estimates/e-5_2001-06/documents/E-5_2008%20Internet%20Version.xls Accessed: June 13, 2008.
[101] City of Morgan Hill, Measure C, 2004.
[102] City of Morgan Hill, Projection of Developed Parkland per 1,000 Population, Based on Draft 09/10 - 11/12 CIP, June 17, 2009.

The City of Morgan Hill has adopted a parkland dedication/park land in-lieu fee ordinance (Municipal Code Chapter 17.28) that requires parkland dedication or in-lieu fees for residential developments. This ordinance requires residential developers to dedicate public parkland or pay in-lieu fees, or both, to offset the demand for neighborhood parkland created by their housing developments. The acreage of parkland or amount of the in-lieu fee required is based upon criteria outlined in Chapter 17.28 of the City's Municipal Code. Through this measure, the City of Morgan Hill would ensure that residential development under the cumulative projects would provide adequate park and recreational facilities to serve residents. The City's Residential Development Control System (RDCS) also generates funding for parks and open spaces, as developers make commitments to pay such fees in order to achieve points so that proposed project will be successful in the RDCS competitions.

Impact C-PS-1: The cumulative projects would increase the number of people utilizing police and fire protection services, schools, parks, and other community services. Impacts on public services can be reduced to a less than significant level by only approving and permitting development that complies with standard measures, such as the provision of parks or in-lieu fees to provide for new facilities. New school and/or parks and recreation facilities could contribute to impacts of development for the cumulative projects, but would not be anticipated to have new of substantially different significant adverse environmental impacts beyond those for the individual cumulative projects. **(Less Than Significant Cumulative Impacts)**

SECTION 6.0 SIGNIFICANT UNAVOIDABLE IMPACTS

If the project is implemented, the following significant unavoidable environmental impacts will occur:

Impact TRANS-1: Under 2015 conditions, the proposed project would exacerbate LOS D intersection operations at Monterey Road/Main Avenue during the AM peak hour. Implementation of the necessary mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. Widening of Main Avenue and limiting sidewalks would conflict with the policies of the Downtown Specific Plan. This mitigation would conflict with the project's objectives and, therefore, the impact at this intersection is significant and unavoidable.

Impact TRANS-1a: Under 2015 conditions, the project alternate would result in impacts to the intersection of Monterey Road/Main Avenue (LOS F during AM and LOS D- during PM peak hour). Implementation of the necessary mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. Widening of Main Avenue and limiting sidewalks would conflict with the policies of the Downtown Specific Plan. This mitigation would conflict with the project's objectives and, therefore, the impact at this intersection is significant and unavoidable.

Impact TRANS-2a: Under 2015 conditions, the project alternate would result in impacts to the intersection of Dunne Avenue/Monterey Road (LOS D during PM peak hour). The mitigation required to reduce the impact from the project alternate to less than significant during the PM peak hour would be to provide an eastbound right-turn overlap phase and a southbound approach with a left-turn, through lane and shared through-right lane. This configuration would be inconsistent with narrowing Monterey Road from four to two lanes between Dunne Avenue to Fifth Street and would require modification of the narrowing proposed under the Project Alternate. With the current project alternate roadway network, the impact at this intersection is significant and unavoidable.

Impact TRANS-4: The proposed Specific Plan, under 2030 conditions, would degrade Monterey Road/Main Avenue intersection operations from LOS D to LOS E and LOS D- during the AM and PM peak hours, respectively. Implementation of the necessary mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing buildings. Widening of Main Avenue and limiting sidewalks would conflict with the policies of the Downtown Specific Plan. This mitigation would conflict with the project's objectives and, therefore, the impact at this intersection is significant and unavoidable.

Impact TRANS-4a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Main Avenue/Monterey Road intersection operations from LOS D to LOS F and LOS E during the AM and PM peak hours, respectively. Implementation of the necessary mitigation would require reduced travel lane and sidewalk widths below City standards due to the proximity of existing

buildings. Widening of Main Avenue and limiting sidewalks would conflict with the policies of the Downtown Specific Plan. This mitigation would conflict with the project's objectives and, therefore, the impact at this intersection is significant and unavoidable.

Impact TRANS-7a: The proposed Specific Plan, under 2030 Project Alternate conditions, would degrade Dunne Avenue/Monterey Road intersection operations from LOS D+ to LOS D during the PM peak hour. The mitigation required to reduce the impact from the project alternate to less than significant during the PM peak hour would be to provide an eastbound right-turn overlap phase and a southbound approach with a left-turn, through lane and shared through-right lane. This configuration would be inconsistent with narrowing Monterey Road from four to two lanes between Dunne Avenue to Fifth Street and would require modification of the narrowing proposed under the Project Alternate. With the current project alternate roadway network, the impact at this intersection is significant and unavoidable.

Impact NV-1: Residential development proposed under the Downtown Specific Plan would be exposed to exterior noise levels exceeding 60 dBA Ldn from traffic noise and 70 dBA Ldn from railroad noise. Exterior noise levels exceeding the acceptable General Plan standards would result in significant impacts to outdoor spaces in new residential development in the Downtown. (Significant Impact) Implementation of these measures would reduce noise impacts to outdoor use areas to a less than significant level for many of the proposed downtown residential units, however, even with incorporation of these mitigation measures to the extent feasible, the outdoor spaces for some residential units will continue to be impacted and, therefore, this impact is significant and unavoidable.

Impact NV-2: Interior noise levels would be reduced through the incorporation of standard measures, however, Lmax noise levels of up to 110 dBA from train warning whistles, would exceed the City's Lmax noise standards. For some downtown residential properties incorporation of project-specific noise reduction treatments will reduce this impact to a less than significant level; however, for many units on properties adjoining the railroad the interior Lmax noise standards may not be met even with incorporation of feasible and best available methods and, therefore, this impact would be significant and unavoidable.

Impact NV-4: Construction activities, even with incorporation of standard and mitigation measures, could impact noise sensitive receptors in the project area for more than one year which would result in a significant and unavoidable impact.

Impact AQ-2: Projected new development through 2015 and 2030 under the proposed project would result in an increase in regional air pollutant emissions of ROG and PM_{10} in excess of BAAQMD thresholds and, therefore, would result in significant impacts to regional air quality. The above measures have the potential to reduce project-related regional emissions by five to ten percent. A reduction of this magnitude would not reduce emissions to below the BAAQMD significance threshold of 80 pounds per day for ROG and PM_{10}.

Project regional air quality impacts, therefore, would remain significant and unavoidable.

Impact C-TRANS-1: The project would contribute to significant unavoidable impacts to the intersections of Monterey Road/Main Avenue and Monterey Road/Dunne Avenue. Mitigation measures for both intersection impacts conflict with the project's objectives and, therefore, are not considered feasible and the cumulative impacts remain significant and unavoidable.

All other significant impacts of the project would be mitigated to a less than significant level through implementation of the mitigation identified in this Master EIR.

SECTION 7.0 CONSISTENCY WITH RELEVANT PLANS AND POLICIES

For each identified plan and policy discussed below, the consistency statements are identical for the Project and Project Alternate, unless otherwise noted.

7.1 REGIONAL PLANS AND POLICIES

7.1.1 Bay Area 2005 Ozone Strategy

The Bay Area Air Quality Management District (BAAQMD), in cooperation with the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), prepared the *Bay Area 2005 Ozone Strategy* which serves as a roadmap for how the San Francisco Bay Area will achieve compliance with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The *Bay Area 2005 Ozone Strategy* updates Vehicle Miles Traveled (VMT) and other assumptions in the 2000 Clean Air Plan (CAP) related to the reduction of ozone in the atmosphere and serves as the current CAP for the Bay Area. The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions used in developing the Ozone Strategy which were based on ABAG's *Projections 2002*. Population and employment projections extend to 2025 in *Projections 2002* and exceed ABAG's current *Projections 2007* for 2025 by approximately 6,400 persons and 5,600 employed residents.

Consistency: The proposed Specific Plan would not increase population and VMT per capita within Morgan Hill that was not foreseen in the current Morgan Hill General Plan and CAP. Because the project is urban infill and located near a transportation corridor and station (Caltrain), the VMT per capita is not anticipated to increase. For these reasons, the proposed project is consistent with the CAP and the *Bay Area 2005 Ozone Strategy*.

7.1.2 Central Coast Regional Water Quality Control Plan

The Regional Water Quality Control Board has developed and adopted a Water Quality Control Plan (Basin Plan) for the Central Coast Basin. The Basin Plan is a master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the Central Coast region.[103] The Regional Board first adopted a complete water quality control plan in 1975 and the last major revision was adopted in 1994.

The Basin Plan provides a program of actions designed to preserve and enhance water quality and to protect beneficial uses. It meets the requirements of the U.S. Environmental Protection Agency, and establishes conditions related to discharges that must be met at all times.

The implementation portion of the Basin Plan includes descriptions of specific actions to be taken by local public entities and industries to comply with the policies and objectives of the Basin Plan. These include measures for erosion and sediment control (nonpoint source management).

[103] The 11,274 square mile Central Coast Region encompasses all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties, as well as the southern one-third of Santa Clara County, and small portions of San Mateo, Kern, and Ventura Counties.

Consistency: Development proposed under the Specific Plan would be required to conform to the requirements of the Regional Water Quality Control Board for erosion and sedimentation control during construction and post-construction periods. With implementation of the City's Standard Conditions of Approval (refer to *Section 3.6 Hydrology and Water Quality*), the proposed project would conform to the plans and policies in the Basin Plan.

7.1.3 Santa Clara Valley Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Santa Clara CMP. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of increased gas tax revenues. The CMP legislation requires that each CMP contain the following five mandatory elements:

1) A system definition and traffic level of service standard element.
2) A transit service and standards element.
3) A trip reduction and transportation demand management element.
4) A land use impact analysis program element.
5) A capital improvement element.

The Santa Clara County CMP includes the five mandated elements and three additional elements:

1) A county-wide transportation model and data base element.
2) An annual monitoring and conformance element.
3) A deficiency plan element.

Consistency: The traffic analysis completed for the project was prepared in accordance with the standards of the CMP and evaluates impacts on regional roadway segments, consistent with CMP policies. The proposed project would not result in any impacts to regional roadway segments, and as discussed in *Section 2.2 Transportation*, the project is consistent with the provisions of the CMP.

7.2 LOCAL PLANS AND POLICIES

7.2.1 Morgan Hill General Plan

7.2.1.1 *Overview*

The Morgan Hill General Plan is the document that contains the City's official goals, policies, and actions which are the mechanism for achieving the community's vision for its future. The General Plan includes the encouragement of urban land uses around the downtown, and incentives to foster infill development instead of sprawl as part of its vision. The preservation and enhancement of the downtown are considered high priorities for the City. The proposed Specific Plan would amend the General Plan land use designations on various parcels throughout the downtown. The proposed General Plan amendments would assist the City in achieving its goals of encouraging urban land uses and fostering infill development in the downtown area.

Consistency: The proposed Specific Plan would amend allowed land uses within the downtown area of Morgan Hill. The proposed amendments to the General Plan would assist the

City in achieving its goal of promoting infill, urban development in the downtown. The Specific Plan, therefore, is generally consistent with the General Plan.

Consistency with individual policies is addressed in the following sections. A summary table is provided in *Section 7.2.1.7*.

7.2.1.2 *Community Development*

Development Patterns Policy 2a: Encourage the orderly development of the city, with concentric growth and infill of existing developed areas.

Consistency: The proposed Specific Plan would allow infill development in the Downtown area of Morgan Hill. The proposed project, therefore, is consistent with this policy.

Development Patterns Policy2b: Ensure that facility/service standards can be met for new development by the time of occupancy.

Consistency: Implementation of the City's Municipal Code, standard conditions of approval, and various General Plan policies would ensure that redevelopment allowed by the Specific Plan would not proceed in the event that individual projects would degrade facility/service standards to an unacceptable level.

Development Patterns Policy 2d: Plan for the needs of all socioeconomic segments of the community, encouraging self-sufficiency in jobs and housing within the city.

Consistency: The proposed project includes increased employment opportunities in conjunction with the construction of additional residential units in the City. The projected development under the Specific Plan would not provide employment for all of the future residents of the project area; however, it is estimated to provide approximately 637 additional jobs in 2030 than currently exist in the project area (refer to *Section 3.14 Population, Jobs, and Housing*), meaning it would result in more jobs for residents than a typical suburban residential development with the same number of residential units and, therefore, is considered consistent with this policy.

Incompatible Uses Policy 6a: Avoid development in areas of natural hazards such as landslide and flood prone areas (see related policies in Open Space and Conservation and Public Safety Elements).

Consistency: The proposed project includes standard measures to address identified natural hazards in the Specific Plan project area (refer to *Section 3.5 Geology and Soils* and *Section 3.6 Hydrology and Water Quality*). The project, therefore, is consistent with this policy.

Residential Development Policy 7a: Plan for a population of approximately 48,000 residents in 2020.

Consistency: The City Council has proposed a ballot measure to exempt 500 residential units in the Specific Plan project area by 2020 from the RDCS process; however, the population cap would remain in place. Alternatively, the Council could pursue set asides for downtown residential development under the existing RDCS to achieve the City's

goal for growth downtown. The proposed project, therefore, is consistent with this policy.

Residential Development Policy 7d: Encourage higher residential densities at locations where convenient access and adequate infrastructure is readily available.

Consistency: The Specific Plan project area is a developed, urban area of Morgan Hill with access to mass transit and existing City services. The project proposes higher residential densities in the Downtown area and, therefore, is consistent with this policy.

Residential Development Policy 7e: Provide for an adequate supply of multi-family housing, located convenient to shopping, services, and transportation routes.

Consistency: The proposed project encourages the development of multi-family housing in a mixed use area of Morgan Hill which would provide residents with easy access to shopping, services, and mass transit. The proposed project, therefore, is consistent with this policy.

Neighborhood Policy 8b: Require any higher density multi-family developments to include site design and a variety of unit types to mitigate potential impacts typically associated with larger projects.

Consistency: Redevelopment under the proposed Specific Plan would undergo architectural review to ensure individual projects would not result in significant impacts on adjacent land uses (refer to *Section 3.1 Land Use*). The Specific Plan would also allow for a variety of unit types within the project area. The proposed project, therefore, is consistent with this policy.

Commercial Development Policy 9a: Encourage a variety of commercial and office development to meet the needs of city residents.

Consistency: The proposed project encourages increased commercial and office development in the Downtown area to meet the needs of the Morgan Hill community. The proposed project, therefore, is consistent with this policy.

Commercial Development Policy 9b: Ensure the viability of downtown and other recognized shopping areas, and discourage isolated and sprawling commercial activities along major roads.

Consistency: The proposed project would increase retail and residential development in the Downtown area in order to ensure the viability of this area as a central shopping area for the Morgan Hill community. The proposed project, therefore, is consistent with this policy.

Commercial Development 9d: Encourage commercial development and concentrate community shopping uses along Monterey Road north of Watsonville Road.

Consistency: The proposed project would concentrate additional retail and office development in Downtown Morgan Hill along Monterey Road. The proposed project, therefore, is consistent with this policy.

Downtown Policy 13a: Enhance the positive, friendly atmosphere of the downtown by encouraging proposed development to expand pedestrian-oriented design and amenities east of Monterey Road to Butterfield Boulevard.

Consistency: The proposed project includes streetscape improvements including widening sidewalks to accommodate outside dining, displays, and landscaping to create an inviting pedestrian environment within the downtown. The Project would retain the existing streetscape for Monterey Road; however, the Project Alternate includes narrowing Monterey Road and pursuing significant streetscape improvements. The Specific Plan also includes the possible construction of an additional at or below grade pedestrian/emergency vehicle railroad crossing in the project area. The proposed Specific Plan would enhance pedestrian connections between Monterey Road and Butterfield Boulevard and, therefore, is consistent with this policy.

Downtown Policy 13c: Consider allowing downtown land uses with night and weekend peak parking demands to share parking spaces with uses that have daytime and weekday peak parking demands.

Consistency: The proposed project includes the development of an adequate supply of accessible and affordable public parking which would provide for shared parking spaces for uses with different peak demand times. The proposed project, therefore, is consistent with this policy.

Downtown Policy 13d: Continue the downtown streetscape and pedestrian-oriented design theme along Monterey Road for at least one block north of Main Avenue and at least one block south of Dunne Avenue, and from Monterey Road east to Butterfield Boulevard between Main and Dunne Avenues, to provide a transition from downtown adjoining commercial areas.

Consistency: The project includes streetscape improvements north of Main Avenue and south of Dunne Avenue on Monterey Road to be completed in Phase III of the proposed implementation plan, as funding permits. The proposed project, therefore, is consistent with this policy.

Downtown Policy 13e: Require adequate parking for all businesses within the downtown.

Consistency: Implementation of the project includes the design and construction of additional surface and structured parking to serve the proposed development (refer to *Section 3.2 Transportation*). Mitigation measures identified in this EIR require the City to create a downtown land use and parking database, and to carry out monitoring and prepare reports every two years to the City Council for review to ensure measures are undertaken to balance parking supply and demand for retail and office development under the Specific Plan. Projected development for the Specific Plan project area in 2015 and 2030 would result in a demand for 306 and 808 additional parking spaces, respectively.

Downtown Policy 13f: Encourage industrial uses to move away from the downtown and into more appropriate industrial areas within the city. Use these vacant parcels to expand activities and uses conducive to the pedestrian-oriented downtown environment.

Consistency: The project proposes increased development of office, commercial, and residential uses on underutilized and vacant sites throughout the Downtown. The project encourages pedestrian-oriented development and would further encourage industrial uses to move from the Downtown. The project, therefore, is consistent with this policy.

Downtown Policy 13g: Encourage retail uses in the downtown, with offices located away from Monterey Road or on upper floors along Monterey Road.

Consistency: The proposed project restricts ground floor uses on Monterey Road north of Fourth Street and on East Third Street to retail, restaurant, entertainment, and service commercial uses. The project, therefore, is consistent with this policy.

Downtown Policy 13h: Encourage a mixture of uses in the downtown that will promote its identity as the cultural and activity center of the city.

Consistency: The proposed project would increase retail, office, and residential development in the Downtown and enhance pedestrian amenities in order to create lively and active central core for the City. The proposed project, therefore, is consistent with this policy.

Downtown Policy 13i: Reinforce the downtown as a major retail and office center through the implementation of the Downtown Design Plan.

Consistency: The Downtown Specific Plan would allow additional retail and office development in the Downtown to reinforce the area as the commercial and office hub of the City. The proposed project, therefore, is consistent with this policy.

Downtown Policy 13j: Locate CalTrain and other transit stops convenient to the downtown, focusing on transit- and pedestrian-oriented development.

Consistency: The proposed project encourages transit ridership through the location of higher density residential development near the existing Caltrain station. The project would also encourage the re-routing of VTA's Bus Route 68 from Monterey Road to Depot Street to connect bus and rail transit in the project area. The proposed project, therefore, is consistent with this policy.

Downtown Policy 13k: Ensure that Circulation Element and road improvement programs provide efficient access to the downtown at a level of service not intended to accommodate regional pass-through traffic.

Consistency: The level of service in the Downtown resulting from the proposed project is discussed in greater detail in *Section 3.2 Transportation*. The proposed project would allow efficient access to Downtown and discourage regional pass-through traffic and, therefore, is consistent with this policy. The Project Alternate would narrow Monterey Road to one lane in each direction which would encourage regional traffic to use alternative north-south routes through the City.

Downtown Policy 13l: Encourage residential uses on upper floors above commercial uses in the downtown area.

Consistency: The proposed Specific Plan requires ground floor commercial uses in some areas and encourages mixed-use residential development in the CBD located throughout Downtown Morgan Hill (refer to Figure 5). The proposed project, therefore, is consistent with this policy.

Public Safety Policy 17b: Promote police and fire security considerations in all structures by ensuring that crime and fire prevention concepts are considered in development and design.

Consistency: Development proposed in the Specific Plan project area would require review by the Fire and Police Departments prior to the issuance of Site Development Permits to ensure projects incorporate crime and fire prevention concepts. The proposed project, therefore, is consistent with this policy.

Parks and Recreation Policy 18b: Parks and recreational facilities shall be sited to maximize access to all residents. Where feasible, neighborhood parks shall be distributed throughout the community so that all residents live within walking distance of a neighborhood or community park. (Walking distance is defined as within a 1/2-mile radius of the park. This may not be feasible in all neighborhoods, especially hillside neighborhoods. See the Parks, Facilities and Recreation Programming Master Plan for definitions of neighborhood and community parks.)

Consistency: The proposed project includes development of a passive park on West Third Street along West Little Llagas Creek. The Specific Plan project area also includes the Morgan Hill Community Center. These facilities are located within walking distance of all residential areas in the Specific Plan project area. The project, therefore, is consistent with this policy.

Parks and Recreation Policy 18k: Encourage the development of trails along creeks and drainage channels, connecting parks, regional trails, schools, library, and other community facilities.

Consistency: The proposed project would use signage to direct pedestrians and bicyclists to use sidewalks and bike lanes through the Downtown where right-of-way constraints preclude trail development along West Little Llagas Creek. The proposed project would include some connection to the West Little Llagas Creek trail which provides access to surrounding community facilities. The project, therefore, is consistent with this policy.

School Policy 19a: Work with the Morgan Hill Unified School District (MHUSD) to assure coordinated planning for school facilities needed in conjunction with new development, and to identify appropriate locations for future school facilities.

Consistency: Development under the proposed Specific Plan would pay school impact fees, and the City will continue to provide quarterly reports to the MHUSD so that the district can monitor the pace and nature of development and take appropriate measures to accommodate anticipated students generated by development in the Specific Plan project area. The project, therefore, would be consistent with this policy.

Sewer Capacity, Water Supply and Storm Drainage 20c: Ensure that the total capacity for the Gilroy/Morgan Hill Wastewater Treatment Facility, its timing for completion, and configuration are consistent with SCJAP policies for the overall growth of Morgan Hill and Gilroy.

Consistency: The proposed project includes standard measures to ensure that redevelopment does not exceed the planned capacity of the Gilroy/Morgan Hill Wastewater Treatment Facility (refer to *Section 3.8 Utilities and Service Systems*) and does not propose an increase in Citywide residential population greater than existing projections. The Redevelopment Agency has paid for sewer treatment capacity within the Specific Plan project area. The proposed project, therefore, is consistent with this policy.

Sewer Capacity, Water Supply and Storm Drainage 21b: Ensure that new development does not exceed the water supply. (SCJAP 7.08)

Consistency: Based on the Water Supply Assessment prepared for the proposed Specific Plan, the City has adequate water to serve buildout the Specific Plan project area (refer to *Section 3.8 Utilities and Service Systems*). The proposed project, therefore, is consistent with this policy.

Sewer Capacity, Water Supply and Storm Drainage 22a: Address issues related to flooding throughout the city.

Consistency: Redevelopment proposed in the Specific Plan project area would elevate habitable spaces one foot above anticipated flood levels and floodproof non-residential construction consistent with the Morgan Hill Municipal Code. Proposed redevelopment would also provide on-site stormwater detention facilities consistent with the Morgan Hill Municipal Code. The proposed project, therefore, is consistent with this policy.

7.2.1.3 *Economic Development*

Business and Employment Opportunities Policy 1c: Promote the overlap between visitor and resident serving uses by encouraging retail goods and services that serve both market segments.

Consistency: The proposed project would increase retail and commercial services Downtown for both future residents and daytime office employees in the area. The proposed project, therefore, is consistent with this policy.

Jobs and Housing Policy 2c: Balance job and housing supplies to minimize housing cost increases, traffic congestion and commute times, and to optimize economic diversity and capacity to provide services. (SCJAP 3.00)

Consistency: The proposed project would include residential, retail, and office development within the Downtown area. Housing development downtown would consist of generally smaller, more affordable residential units than in other areas of the City, and create employment generating uses to partially offset the increase in population in the City (refer to *Section 3.14 Population, Jobs, and Housing*). The location of new residential, commercial, and office development near transit is anticipated to limit new traffic congestion by providing commute options for residents and workers. The range of downtown business development would increase economic diversity in the City and make use of existing infrastructure capacity and urban services in the center of Morgan Hill. The proposed project, therefore, is consistent with this policy.

7.2.1.4 *Circulation*

Level of Service Policy 2e: Integrate planning for land use and transportation development by insuring that the timing, amount, and location of urban development is consistent with the development of the transportation system capacity, and that land uses are designed to promote use of appropriate transportation modes. (SCJAP 11.05)

Consistency: The proposed project is located in an urban area with existing transportation infrastructure including roadways and mass transit services and facilities. The proposed increase in development in the Specific Plan project area would support existing investments in transportation infrastructure and promote the use of mass transit (i.e. Caltrain). The proposed project, therefore, is consistent with this policy.

Level of Service Policy 3d: As the design criteria for roadway improvements, use LOS E at freeway ramp intersections and LOS D+ or better elsewhere, except use LOS D at the following intersections (where achieving LOS D+ would require extraordinary development expenditure and right-of-way acquisition):

- Madrone Parkway and Monterey Road
- Tennant Avenue and Butterfield Boulevard
- Watsonville Road and Monterey Road

Consistency: As discussed in *Section 3.2 Transportation*, a Transportation Impact Analysis was prepared for the project consistent with the City's current Level of Service Policy. Development in the Specific Plan project area would result in significant impacts to five intersections. Mitigation measures have been incorporated in the project where feasible; however, several intersection LOS impacts of the project would remain significant and unavoidable. The proposed project, therefore, is inconsistent with this policy.

It should be noted that the City is currently updating the Circulation Element of the General Plan and this LOS policy is proposed for revision as part of the update.

Circulation Policy 5a: Ensure that all developments provide adequate and convenient parking (also see Policy CD-13f).

Consistency: The proposed project includes the development of surface and structured parking lots throughout the Downtown to ensure the adequacy and convenience of parking facilities. Mitigation measures identified in this EIR require the City to carry out monitoring and prepare reports every two years to the City Council for review to ensure measures are undertaken to balance parking supply and demand for retail and office development under the Specific Plan. The proposed project, therefore, is consistent with this policy.

Circulation Policy 6a: Coordinate with VTA to provide improved local bus service and to encourage people to ride the bus for local as well as longer trips (e.g., to Gilroy and San José).

Consistency: The proposed project includes coordination with VTA to re-route Bus Route 68 to Depot Street due tot the proposed Monterey Road narrowing. The proposed modification to this existing bus route would improve connectivity between bus and

rail service and would encourage greater use of the existing commuter rail service. The proposed project, therefore, is consistent with this policy.

Circulation Policy 7p: Promote extension of bicycle paths in conjunction with flood control efforts.

Consistency: The proposed project would use signage to direct pedestrians and bicyclists to use sidewalks and bike lanes through the Downtown where right-of-way constraints preclude trail development along West Little Llagas Creek in conjunction with flood control improvement. The proposed project would include some connection to the planned West Little Llagas Creek trail which provides access to surrounding community facilities. The project, therefore, is consistent with this policy.

Circulation Policy 8a: Ensure adequate pedestrian access in all developments, with special emphasis on pedestrian connections in the downtown area, in shopping areas and major work centers, including sidewalks in industrial areas.

Consistency: The proposed project includes widening sidewalks, mid-block crossings, and pedestrian links from parking lots to adjacent roadways. The proposed project, therefore, would ensure adequate pedestrian access in the Downtown area and is consistent with this policy.

Circulation Policy 8b: Promote walking as an alternate transportation mode for its contribution to health and the reduction of energy consumption and pollution. (SCJAP 11.03)

Consistency: The proposed Specific Plan would stimulate additional office, retail, and residential development in the Downtown area to create an active urban center. The project would promote walking between the various uses in the Downtown through development of a mix of uses and creation of a pedestrian-friendly environment through roadway narrowing and sidewalk widening. The proposed project, therefore, is consistent with this policy.

7.2.1.5 *Open Space and Conservation*

Hillside Areas Policy 4b: Preserve scenic hillsides around the city in an undeveloped state, wherever feasible.

Consistency: Nob Hill located on Blocks 12 and 13 of the Specific Plan project area would remain zoned *Residential Estate* which would allow low density residential development on the lower hillsides. This zoning district requires an eighty foot setback from the ridgeline and would ensure Nob Hill remains mostly undeveloped. The proposed project, therefore, is consistent with this policy.

Riparian Areas Policy 5a: Encourage reclamation of degraded streams and riparian areas.

Consistency: Under a separate project (PL 566), flood control improvements are planned along West Little Llagas Creek through the Downtown. Some channel widening and installation of passive park/open space is proposed along the creek. The Specific Plan allows for these improvements. The project, therefore, is generally consistent with this policy.

Riparian Areas Policy 5c: A proposed streamside park along West Little Llagas Creek should be actively implemented and connected to the County trail system. (SCJAP 16.10 & 16.12)

Consistency: The proposed project would construct a passive park along West Little Llagas Creek and provide signage direction bicyclists and pedestrians to nearby trailheads where right-of-way constraints in the downtown core preclude construction of the trail adjacent to the creek. The proposed project, therefore, is consistent with this policy.

Plants and Wildlife Policy 6e: Identify and protect wildlife, rare and endangered plants and animals and heritage resources from loss and destruction. (SCJAP 15.09)

Consistency: Trees and vacant parcels in the project area may contain nesting raptors. Mitigation measures are included in the project to reduce impacts to nesting raptors to a less than significant level during construction activities (refer to *Section 3.10 Biological Resources*). The proposed project would identify and protect wildlife from loss and destruction and, therefore, is consistent with this policy.

Conservation Policy 7a: New development should be designed to exceed State standards for the use of water and energy.

Consistency: In accordance with the Morgan Hill Municipal Code, redevelopment under the proposed Specific Plan would incorporate energy conservation measures which exceed Title 24 to the satisfaction of the Community Development Director (refer to *Section 3.12 Energy*). The proposed project, therefore, is consistent with this policy.

Conservation Policy 7b: Promote energy conservation techniques and energy efficiency in building design, orientation and construction.

Consistency: Redevelopment proposed under the Specific Plan, as well as other development in Morgan Hill, will incorporate energy conservation and efficiency measures to the satisfaction of the Community Development Director. The proposed project, therefore, is consistent with this policy.

Historic Preservation Policy 8a: Encourage the preservation and rehabilitation of the city's historic structures.

Consistency: The proposed project includes Redevelopment Agency grants and loans to preserve historic resources in the Downtown. Specific Plan design guidelines would require that development adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties when modification or renovation of a historic resource is proposed. The Granada Theater upright sign/marquee, a locally historic object, may be moved or modified at the time of future redevelopment, if a Historic Relocation Permit is approved by the City. The proposed project, therefore, is generally consistent with this policy.

7.2.1.6 *Public Health and Safety*

Environmental Hazards Policy 1a: Limit uses on lands with geologic hazards.

Consistency: The proposed project includes standard measures to address natural hazards in the Specific Plan project area (refer to *Section 3.5 Geology and Soils*). The project, therefore, is consistent with this policy.

Hazardous Materials Policy 3t: Provide mitigation to remedy the effects of new or expanding development over areas with environmental contamination of any and all unauthorized discharges.

Consistency: Two sites within the Specific Plan project area have been identified as containing residual contamination. Additional sites proposed for residential development within the project area may be contaminated and would require cleanup prior to redevelopment. Mitigation measures included in the project to address environmental contamination are discussed in *Section 3.7 Hazards and Hazardous Materials*. The proposed project includes mitigation for existing contamination in the project area and, therefore, is consistent with this policy.

Flood Control Policy 4b: Prohibit development in floodways and regulate in floodplains to minimize flood damage and be consistent with the federal flood insurance program and Santa Clara Valley Water District regulations. (SCJAP 15.05)

Consistency: Redevelopment proposed in the Specific Plan project area would elevate habitable spaces one foot above anticipated flood levels and floodproof non-residential construction consistent with the Morgan Hill Municipal Code. Proposed redevelopment would also provide on-site stormwater detention facilities consistent with the Morgan Hill Municipal Code. The proposed project, therefore, is consistent with this policy.

Noise Policy 7a: New development projects shall be designed and constructed to meet acceptable exterior noise level standards, as follows:

- The maximum exterior noise level of 60 dBA L_{dn} shall be applied in residential areas where outdoor use is a major consideration. Where the City determines that providing an L_{dn} of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, an L_{dn} of 65 dBA may be permitted.
- Indoor noise levels should not exceed an L_{dn} of 45 dBA in new residential housing units.
- Noise levels in new residential development exposed to an exterior L_{dn} 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous noise levels in all other habitable rooms should not exceed 55 dBA. The maximum outdoor noise level for new residences near the railroad shall be 70 dBA L_{dn}, recognizing that train noise is characterized by relatively few loud events.

Consistency: The Specific Plan project area is subject to elevated noise levels due to traffic and train passbys. Future development would be required to provide acoustical shielding for primary outdoor use areas where noise levels exceed the guidelines of the General Plan. In accordance with state law, multi-family residences would be required to meet interior noise levels of 45 dBA L_{dn}. Residences proposed adjacent to the railroad corridor may not be able to meet the identified maximum instantaneous noise

level requirements of this policy incorporating best available technology and, therefore, the project would not be consistent with this policy.

7.2.1.7 *Summary of General Plan Consistency*

Table 7.2-1
Summary of Project Consistency with Morgan Hill General Plan

Name of Policy	Project is Consistent	Project is Inconsistent
Development Patterns Policy 2a	X	
Development Patterns Policy2b	X	
Development Patterns Policy 2d	X	
Incompatible Uses Policy 6a	X	
Residential Development Policy 7a	X	
Residential Development Policy 7d	X	
Residential Development Policy 7e	X	
Neighborhood Policy 8b	X	
Commercial Development Policy 9a	X	
Commercial Development Policy 9b	X	
Commercial Development 9d	X	
Downtown Policy 13a	X	
Downtown Policy 13c	X	
Downtown Policy 13d	X	
Downtown Policy 13e	X	
Downtown Policy 13f	X	
Downtown Policy 13g	X	
Downtown Policy 13h	X	
Downtown Policy 13i	X	
Downtown Policy 13j	X	
Downtown Policy 13k	X	
Downtown Policy 13l	X	
Public Safety Policy 17b	X	
Parks and Recreation Policy 18b	X	
Parks and Recreation Policy 18k	X	
School Policy 19a	X	
Sewer Capacity, Water Supply and Storm Drainage 20c	X	
Sewer Capacity, Water Supply and Storm Drainage 21b	X	
Sewer Capacity, Water Supply and Storm Drainage 22a	X	
Business and Employment Opportunities Policy 1c	X	
Level of Service Policy 2e	X	
Level of Service Policy 3d		X
Circulation Policy 5a	X	
Circulation Policy 6a	X	
Circulation Policy 7p	X	
Circulation Policy 8a	X	
Circulation Policy 8b	X	

Table 7.2-1 Summary of Project Consistency with Morgan Hill General Plan		
Name of Policy	**Project is Consistent**	**Project is Inconsistent**
Hillside Areas Policy 4b	X	
Riparian Areas Policy 5a	X	
Riparian Areas Policy 5c	X	
Plants and Wildlife Policy 6e	X	
Conservation Policy 7a	X	
Conservation Policy 7b	X	
Historic Preservation Policy 8a	X	
Environmental Hazards Policy 1a	X	
Hazardous Materials Policy 3t	X	
Flood Control Policy 4b	X	
Noise Policy 7a		X

In summary, the proposed project is in substantial conformance with the City of Morgan Hill General Plan.

7.2.2 Morgan Hill Zoning Ordinance

The purpose of Morgan Hill Zoning Ordinance is to guide the growth of the city in an orderly manner, based on the adopted general plan, and to protect the public health and general welfare by regulating the use of land and buildings, space between buildings, height and bulk of buildings, and by requiring the provision of off-street parking facilities, landscaping, and other necessary site improvements. The Specific Plan area contains a variety of zoning districts. The Specific Plan itself proposes one new zoning district, the Central Business District, and modifies other existing zoning designations for uses specifically in the Specific Plan area.

Consistency: Although the proposed Specific Plan would modify the existing zoning districts in the Specific Plan area, it is generally consistent with the goals of the current General Plan which the Zoning Ordinance is intended to implement. Also, the Specific Plan will be adopted as the applicable land use zoning for the downtown area. The proposed Specific Plan, therefore, will be consistent with the Morgan Hill Zoning Ordinance upon adoption.

SECTION 8.0 ALTERNATIVES TO THE PROPOSED PROJECT

8.1 INTRODUCTION

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

The range of alternatives selected for analysis is governed by the "rule of reason," which requires the EIR to discuss only those alternatives necessary to permit a reasoned choice. Although the alternatives do not have to meet every goal and objective set for the proposed project, they should "feasibly attain most of the basic objectives of the project."

CEQA does not require that all possible alternatives be evaluated, only that "a range of feasible alternatives" be discussed to encourage both meaningful public participation and informed decision making. In selecting alternatives to be evaluated, consideration may be given to their potential for reducing significant unavoidable impacts, reducing significant impacts that are mitigated by the project to less than significant levels, and further reducing less than significant impacts.

The three critical factors to consider in selecting and evaluating alternatives are: (1) the project's objectives, (2) the significant impacts from the proposed project which could be reduced or avoided by an alternative, and (3) the feasibility of the alternatives available.

Significant Impacts of the Project

As discussed above, the CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and would achieve most of the project objectives. This EIR addresses both the impacts of the proposed Specific Plan "Project" and a "Project Alternate" which are described in detail in *Section 2.0 Description of the Proposed Project*. Unless otherwise noted, the impacts under the Project and Project Alternate would be identical.

The significant impacts of the project include:

- transportation (intersection LOS impacts)
- noise and vibration (impacts to residences and construction noise)
- air quality (regional project impacts and construction)
- hazards and hazardous materials
- biological resources (possible impacts to nesting birds)
- cumulative transportation impacts

With the exception of transportation, noise, regional air quality, and cumulative impacts, all of the identified impacts can be reduced to a less than significant level with mitigation measures included in the project. Alternatives required by CEQA to be considered should be capable of avoiding or reducing some or all of the significant impacts listed above.

Consideration of a "No Project" alternative is mandatory. Other logical alternatives include a reduced scale alternative and a location alternative. A modified land use alternative is included as a design alternative and is not intended to reduce any of the significant impacts of the project. Alternatives discussed in the following section include:

1. No Project
2. Reduced Scale Alternative
3. Location Alternative
4. Modified Land Use Alternative
5. Monterey Road Narrowing Design Alternative

Objectives of the Project

While CEQA does not require that alternatives must be capable of meeting all the project objectives, their ability to meet most of the objectives is relevant to their consideration. The City has identified the following basic objectives for the project:

- Increase residential density within the Specific Plan boundary, as well as on opportunity sites outside the Specific Plan Boundary to support Downtown businesses and create a downtown neighborhood;
- Develop standards for new commercial spaces to encourage and accommodate a wide diversity of commercial uses serving the community;
- Coordinate parking strategy with realistic growth projections in order to accommodate increased parking demand;
- Create a public investment plan with partial funding for downtown public infrastructure projects from the Redevelopment Plan Amendment approved in 2005 in order to encourage redevelopment in Downtown;
- Create an active downtown through intensifying residential, retail, restaurant, and entertainment uses, within an urban setting improved with landscaping and streetscape improvements;
- Make Monterey Road and Third Street more pedestrian and retail friendly, and improve other roads with better street lighting and streetscape improvements in order to encourage residents to live, work, shop, and dine in Downtown;
- Strengthen Downtown's identity and scale with new design related to a traditional character; and create visual and physical linkages to Downtown with landscaping, bike paths and entry features, and link Downtown commercial uses to common parking areas available to the general public.

Feasibility of Alternatives

CEQA, the CEQA Guidelines, and case law on the subject have found that feasibility can be based on a wide range of factors and influences. CEQA's general definition of feasibility is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Among the factors that may be taken into account in considering the feasibility of an alternative are "…site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site…" [Section 15126.6 (f)(1)].

8.2 NO PROJECT ALTERNATIVE

The CEQA Guidelines stipulate that an EIR specifically include a "No Project" Alternative, which should discuss both "the existing conditions, as well as what will be reasonably be expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services."

Under a No Project Alternative, street improvements for pedestrians would be limited. Downtown would continue to be redeveloped under existing land use designations (primarily Mixed Use) and zoning (primarily CC-R) and residential densities would be limited to 18 units per acre, except on the three opportunity sites identified in the existing Downtown Plan, which have already been rezoned to allow 25 to 40 units per acre. Redevelopment would be expected to occur on parcels with these designations. Increased retail uses, especially restaurants, entertainment uses, food stores, and other retail may be limited by the lower density residential uses anticipated under the No Project Alternative. The goals of the current Downtown Design Plan include slowing traffic on Monterey Road, encouraging non-automobile links to the downtown and commuter rail station, and exploring narrowing Monterey Road to two lanes.

8.2.1 *Comparison of Environmental Impacts*

The extent to which this No Project Alternative might reasonably be expected to result in lesser project impacts is discussed below for each of the areas of significant impact for the proposed project.

Transportation Impacts

2015 General Plan

Projected level of service for the 24 study intersections under 2015 General Plan conditions is shown in Table 7 of Appendix B. The intersection of Monterey Road/Main Avenue LOS D operations would continue to be exacerbated during the AM peak hour under 2015 General Plan conditions; however, the increase in average critical delay and the volume to capacity (V/C) would be less than under 2015 Specific Plan conditions. The 2015 Project Alternate impact to Monterey Road/Dunne Avenue would also be avoided under 2015 General Plan conditions. The 2015 General Plan conditions would not result in any greater intersection LOS impacts than the 2015 Project. For 2015, the No Project Alternative would reduce one intersection impact to Monterey Road/Dunne Avenue under the 2015 Project Alternate to a less than significant level.

2030 General Plan

The No Project Alternative would result in significant LOS impacts to Monterey Road/Main Avenue during the AM and PM peak hours. This alternative would avoid impacts to Depot Street/Main Avenue resulting from the 2030 Project (AM peak hour). This alternative would also avoid the 2030 Project Alternate impacts to Hale Avenue/Main Avenue (AM peak hour), Monterey Road/Dunne Avenue (PM peak hour), Depot Street/Main Avenue (AM and PM peak hours), and Butterfield Boulevard/Main Avenue (PM peak hour).

Noise and Vibration Impacts

Under the existing General Plan, residential uses can be developed adjacent or near the UPRR tracks and along streets where traffic noise is over 60 dBA L_{dn} if in conformance with General Plan noise policies. The number of new residences that could be exposed to noise and vibration would be less than the proposed project since the intensity of residential development and number of residential units would be lower. Noise and vibration impacts to future residents near the UPRR tracks and major roadways would be similar to the proposed project.

Similarly, the length of time residents in the Downtown would be exposed to construction noise would likely be less than under the proposed project. The City's Redevelopment Agency does own several properties in the Downtown, and at a minimum, these properties are anticipated to redevelop in the future. The length of time residents are exposed to construction noise would be reduced, but depending on the timing and location of future redevelopment, significant temporary impacts from construction noise could still occur.

Air Quality Impacts

Regional Air Quality

Under the No Project Alternative, growth would still occur in conformance with the existing General Plan. Vacant sites are likely to develop and some developed sites may be redeveloped at higher intensities, in conformance with the existing General Plan land use designations and zoning. Under the No Project Alternative approximately 52 percent less residential development, 26 percent less retail, and approximately the same level of office/service uses would be developed than projected to be developed by 2030 under the proposed Specific Plan.

The significant regional air quality impacts identified for projected 2015 development and projected 2030 development under the Specific Plan results from an aggregate of development projects in the Downtown that would collectively exceed project thresholds under BAAQMD Guidelines. Under the No Project Alternative, the aggregate increase in emissions would be less than 80 pounds per day for NO_x, ROG, and particulate matter and, therefore, would be less than significant.

Construction Air Quality

Construction impacts, and mitigation measures to avoid excess dust generation, would be similar to the proposed project.

Hazards and Hazardous Materials Impacts

Like the proposed project, some of the development allowed under the No Project Alternative may place sensitive uses on parcels where hazardous materials contamination has occurred. Impacts would be similar for Block 14. Additional residential uses are not currently allowed on Block 20. Like the proposed project, mitigation measures could reduce potential impacts to a less than significant level. Hazards and hazardous materials impacts would be similar to the proposed project, with the exception of redevelopment of Block 20.

Biological Resources Impacts

Even under the No Project Alternative, some sites within the Downtown would redevelop. Like the proposed project, indigenous oak trees may be removed to accommodate redevelopment and impacts to nesting birds during construction could occur. The rate of redevelopment and intensification; however, would be lower than under the proposed project. Although the No Project Alternative could result in fewer impacts to trees used by nesting birds, it would not completely avoid impacts to these resources.

Cumulative Impacts

Transportation

Implementation of the existing General Plan in the Downtown area, along with other cumulative projects would result in a deterioration of level of service at some intersections. There would be fewer trips generated under the No Project Alternative, resulting in a reduction in cumulative traffic impacts in 2030.

Conclusion: In summary, the No Project Alternative would avoid the significant transportation, regional air quality, and cumulative impacts of the project. Other significant impacts would be reduced, but not completely avoided.

8.2.2 *Feasibility*

The No Project Alternative is feasible from a land use and planning standpoint; however, the lack of coordinated strategies to increase parking supply and limitations on residential density would be expected to make redevelopment less feasible.

8.2.3 *Relationship to Project Goals and Objectives*

The No Project Alternative would allow for intensification of development under the existing General Plan designations and zoning districts which would meet some of the basic objectives of the project. The No Project Alternative; however, would not create the coordinated parking strategy for downtown and allow as great an increase in residential density as the proposed Specific Plan which may hinder attainment of some of the project objectives.

8.3 REDUCED SCALE ALTERNATIVE

The Reduced Scale Alternative would consist of a smaller increase in projected residential, retail, and office development Downtown, defined as a reduction of the project to 60 percent of the current development planned under the General Plan for the Downtown by 2015. It should be noted that this alternative would allow for less development than is currently allowed under the City's General Plan and existing Downtown Plan. This would be roughly equivalent to 258 more residential units, 27,000 square feet of retail uses, and 18,000 square feet of office space than under existing conditions. Some intensification and taller building heights would be allowed only along Monterey Road in a limited area zoned CBD. The remainder of the *Mixed Use* area in the Downtown would retain CC-R zoning and residential zoning designations would not change. Like the proposed project, pedestrian improvements would be included on Third Street. The provision of new parking spaces would be limited proportionally. This change in the intensity of development would reduce traffic generation and would avoid the significant transportation impacts of the project to the

Monterey Road/Main Avenue intersection in 2015 and 2030. In general, the Specific Plan project area, including Downtown, Block 19 and Block 20, would continue to be redeveloped under existing land use designations (primarily Mixed Use) and zoning (primarily CC-R).

8.3.1 *Comparison of Environmental Impacts*

The extent to which the Reduced Scale Alternative might reasonably be expected to result in lesser project impacts is discussed below for each of the areas of significant impact for the proposed project.

Transportation Impacts

2015 Reduced Scale

Under the Reduced Scale Alternative, all of the signalized study intersections would operate at acceptable levels of service or the increased delay from projected traffic would be less than significant. Unsignalized intersections would operate at LOS D or better or would not meet signal warrants. The limited redevelopment of downtown properties under the Reduced Scale Alternative is not projected to result in significant impacts to any of the study intersections.

2030 Reduced Scale

The Reduced Scale Alternative would avoid the significant transportation impacts at five intersections from the project and project alternate.

Noise and Vibration Impacts

Under the existing General Plan land use designation and zoning, residential uses can be developed adjacent to or near the UPRR tracks and along streets where traffic noise is over 60 dBA L_{dn} if in conformance with General Plan noise policies. The number of new residences that could be exposed to noise and vibration would be less than under the proposed project. Noise and vibration impacts to future residents near the UPRR tracks and major roadways would be similar to the proposed project.

Similarly, the length of time residents in the Downtown would be exposed to construction noise would likely be less than under the proposed project. The City's Redevelopment Agency does own several properties in the Downtown, and at minimum, these properties are anticipated to redevelop in the future. Some privately owned sites are also likely to develop or redevelop in the 2030 time horizon. The length of time residents are exposed to construction noise would be reduced, but depending on the timing and location of future redevelopment, significant temporary impacts from construction noise could still occur.

Air Quality Impacts

Regional Air Quality Analysis

The significant regional air quality impact identified for projected 2015 development and projected 2030 development under the proposed project results from an aggregate of development projects in the Downtown that would collectively exceed project thresholds under BAAQMD Guidelines. Under the Reduced Scale Alternative, additional development would be approximately 60 percent of the current development planned under the General Plan for the Downtown by 2015. This reduction

in development would reduce air emissions below project-level thresholds (i.e., 80 pounds per day of NO_x and PM_{10}). The Reduced Scale Alternative, therefore, would avoid any significant air quality impact from projected development by 2015 and 2030.

Construction Air Quality

Construction impacts, and mitigation measures to avoid excess dust generation, would be similar to the proposed project.

Hazards and Hazardous Materials Impacts

Like the proposed project, some of the development allowed under the Reduced Scale Alternative may place sensitive uses on parcels where hazardous materials contamination has occurred. Impacts would be similar for Block 14. This alternative would not change zoning on Block 20 and additional residential uses would not be allowed at this location. Similarly, redevelopment could occur on Blocks 11-14, in an area within a moderate fire hazard zone for wildland fires. Like the proposed project, mitigation measures could reduce potential impacts to a less than significant level. Hazards and hazardous materials impacts would be similar to the proposed project, with the exception of redevelopment of Block 20.

Biological Resources Impacts

Under the Reduced Scale Alternative, some sites within the Downtown would still be redeveloped. As with the proposed project, indigenous oak trees may be removed to accommodate redevelopment and impacts to nesting birds during construction could occur. The rate of redevelopment and amount of intensification would be lower than under the proposed project, however. Although the Reduced Scale Alternative could result in reduced impacts to indigenous oak trees and impacts to trees used by nesting birds, it would not completely avoid impacts to these resources.

Cumulative Impacts

Transportation

Implementation of the Reduced Scale Alternative in the Downtown area, along with other cumulative projects would result in a deterioration of level service at some intersections, such as Monterey Road/Main Avenue**.** There would be fewer trips generated under the Reduced Scale Alternative, resulting in a reduction in the project's contribution to cumulative traffic impacts in 2030; however, the project's contribution to cumulative traffic impacts would remain significant.

Conclusion: In summary, the Reduced Scale Alternative would avoid the significant transportation and regional air quality impacts and lessen the project's contribution to the cumulative impacts of the project. Other significant impacts would be reduced, but not completely avoided.

8.3.2 *Feasibility*

The Reduced Scale Alternative would require modifications to the existing General Plan and zoning in the Downtown to reduce development potential. This alternative could require voters to change recently approved modifications to the RDCS program allowing 500 additional residential units in the Downtown.

8.3.3 *Relationship to Project Goals and Objectives*

The very small amount of increased intensity allowed by the Reduced Scale Alternative would not meet the basic project objectives of increasing residential density within the Specific Plan project area to support Downtown businesses; creating a public investment plan with partial funding for downtown public infrastructure projects to encourage redevelopment in Downtown; create an active downtown through intensifying residential, retail, restaurant, and entertainment uses, within an urban setting improved with landscaping and streetscape improvements; or strengthen Downtown's identity and scale with new design related to a traditional character.

8.4 LOCATION ALTERNATIVES

The CEQA Guidelines encourage consideration of an alternative site when significant effects of the project might be avoided or substantially lessened. Only locations that would avoid or substantially lessen any of the significant effects of the project and meet most of the project objectives need be considered for inclusion in an EIR. An alternative location elsewhere in Morgan Hill or southern Santa Clara County would not encourage redevelopment in the existing downtown, strengthen the identity of the existing downtown, or create a downtown neighborhood; however, a similar amount of development could be accommodated on a similarly sized project site in Morgan Hill.

Location alternatives were considered for two vacant sites in Morgan Hill. Both sites area located east of US 101, close to the freeway. A new downtown could be created 1) on 93.3 acres southeast of US 101 between Cochrane Road and Half Road (Cochrane Road East), or 2) on 147.9 acres on the east side of US 101 on both sides of Tennant Avenue between Barrett Avenue and Fisher Avenue (Southeast Quadrant). The Southeast Quadrant site is located outside the City limits but within the Sphere of Influence. The Southeast Quadrant is not currently developed with adequate streets and infrastructure that would be needed to accommodate a downtown. A mixed-use development including high density residential, retail, and office uses could be constructed on either of these sites under this alternative. The Location Alternative sites are shown in Figure 24.

Transportation Impacts

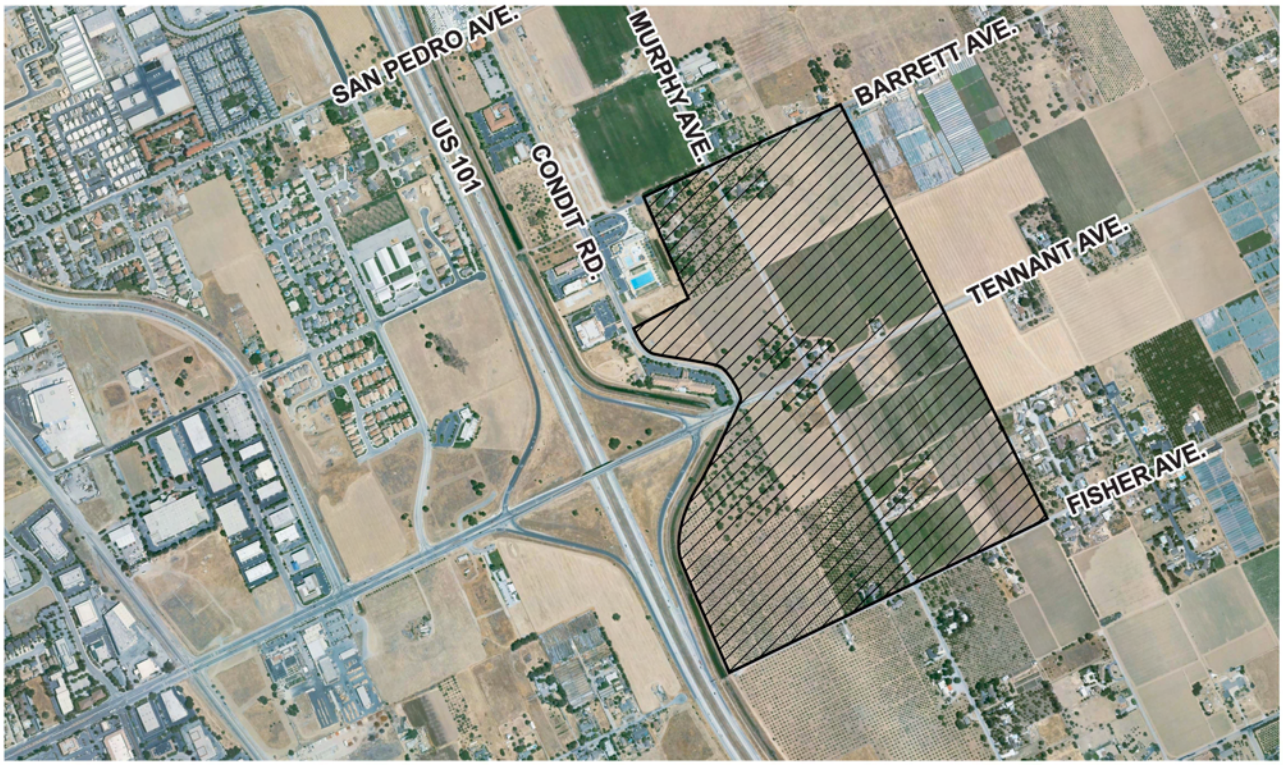
The location alternatives would not be centrally located with access to existing mass transit such as Caltrain and VTA bus routes. Intersection LOS impacts may be reduced due to the alternative location sites proximity to existing freeway interchanges; however, vehicle miles traveled would increase based on the location of these sites on the urban edges of Morgan Hill.

Given the location alternatives distance to the existing Downtown it would likely reduce the project's intersection LOS impacts to less than significant. However, given the lack of roadway capacity, primarily two-lane roads, both of the alternative locations have the potential to result in additional intersection LOS impacts.

Noise and Vibration Impacts

The proposed location alternatives may still be subject to roadway noise in excess of 60 dBA L_{dn}. Due to the presence of major roadways and US 101 both alternative location sites would be subject to greater ambient noise levels. These sites would not be subject to L_{max} noise levels in excess of the City's standards or vibration due to train passbys since no railroad tracks are located adjacent to these sites. Although the impact of roadway noise levels would be greater on both Location Alternative

Alternative 1 - Cochrane Road East



Alternative 2 - Southeast Quadrant

LOCATION OF ALTERNATIVE SITES FIGURE 24

sites than the proposed project, maximum noise levels and vibration impacts from train passbys would be avoided.

Residential development is located adjacent to each alternative location site. The length of time nearby residents could be exposed to construction noise would likely be similar to the proposed project given the need to construct infrastructure and a substantial amount of development that would be proposed on vacant land.

Air Quality Impacts

Regional Air Quality

Under the Location Alternatives, additional growth would occur on existing vacant sites in Morgan Hill. Construction of a high-density development on currently vacant sites outside the City's center would reduce the multi-modal benefits of the project. No large-scale commuter facilities, such as a train station, are located proximate to these alternative locations. Therefore, vehicle trips, vehicle miles traveled (VMT), and associated emissions of criteria pollutants could be greater than the proposed project.

The significant regional air quality impacts of the project would be greater since the same amount of development would be proposed. Mass transit options (i.e., bus and links to train service) would be limited for both location alternative sites.

Construction Air Quality

Construction impacts could be greater than the proposed project as more mass grading could be required. Like the proposed project, redevelopment of the Cochrane Road East and Southeast Quadrant sites would involve demolition of some existing buildings, but the Cochrane Road East site is predominantly undeveloped and the Southeast Quadrant site has few existing buildings. Mitigation measures to avoid excess dust generation would be similar to the proposed project.

Hazards and Hazardous Materials Impacts

Like the proposed project, the location alternative sites may place sensitive uses on parcels where hazardous materials contamination has occurred due to agricultural use. The two location alternative sites, however, have been used for agricultural production for a longer time than the historically developed downtown area. Like the proposed project, mitigation measures would likely be required to reduce potential impacts to a less than significant level. Hazards and hazardous materials impacts would be similar to the proposed project.

Biological Resources Impacts

Under the Location Alternatives, like the proposed project, mature trees may be removed from developed parcels and parcels in agricultural use to accommodate redevelopment and impacts to nesting birds during construction could occur. The Location Alternatives, therefore, would have similar biological impacts as the proposed project.

Cumulative Impacts

Transportation

The cumulative intersection LOS impacts of the project occur in the vicinity of the Downtown Specific Plan project area. The location of the two alternative sites would reduce the project's contribution to cumulative intersection LOS impacts in this area to a less than significant level. There could be impacts to other intersections in Morgan Hill, however, such as intersections along Cochrane Road.

Other Impacts

Land Use Impacts

Development on the Southeast Quadrant site would require annexation of the site into the City of Morgan Hill. Development of either location alternative would contribute to continued blight in the downtown and would not be consistent with the General Plan vision and policies to revitalize downtown and encourage infill development.

Agricultural Resources Impacts

Both of the identified alternative locations would result in impacts to Prime Farmland and Unique Farmland. These impacts to agricultural lands would be greater than under the proposed Specific Plan. Development on either location alternative would not be consistent with the General Plan vision and policies encouraging agriculture within the City's Sphere of Influence.

Hydrology and Water Quality Impacts

The Location Alternatives would result in greater runoff than the proposed Specific Plan development due to construction of urban development on sites that are currently vacant. The construction of new infrastructure such as roads, sewer, and water on these sites to serve the new development would also result in greater water quality impacts although mitigation measures similar to those proposed by the Specific Plan would reduce these impacts to a less than significant level.

Conclusion: In summary, the Location Alternative sites would be subject to greater roadway noise impacts than the proposed Specific Plan project area. Maximum instantaneous noise and vibration impacts would be reduced due to the lack of railroad tracks near these sites. The Location Alternative sites would also result in greater land use impacts due to blight that would be expected to occur in the existing downtown area and agricultural impacts from the loss of agricultural lands on both alternative sites. Development of the Location Alternative sites would also result in greater air quality impacts and contributions to global climate change due to increased VMT.

8.4.2 *Feasibility*

The Location Alternative sites are feasible from a land use and planning standpoint. Development of either of these sites would require general plan amendments and rezonings and, in the case of the Southeast Quadrant, annexation.

8.4.3 *Relationship to Project Goals and Objectives*

The Location Alternative sites could be developed with a high-density mixed-use residential and commercial development. The Location Alternative sites would not meet the basic project objectives of increasing residential density within the Specific Plan project area to support Downtown businesses; creating a public investment plan with partial funding for downtown public infrastructure projects to encourage redevelopment in Downtown; create an active downtown through intensifying residential, retail, restaurant, and entertainment uses, within an urban setting improved with landscaping and streetscape improvements; or strengthen Downtown's identity and scale with new design related to a traditional character.

8.5 MODIFIED LAND USE ALTERNATIVE

Under this alternative the proposed land use on Block 16 would be modified to allow for greater flexibility of the future uses on this block. This alternative is not being considered due to its potential to reduce the significant impacts of the project but rather as a design alternative to provide for a different combination of uses to be allowed on Block 16 than would be allowed under the currently proposed General Plan land use designation and zoning district. The Modified Land Use Alternative would designate the 6.2-acre Block 16 for Mixed Use and CBD zoning. This Modified Land Use Alternative would allow for the site to be developed consistent with the objective of intensifying development and providing a mix of complementary uses, such as a Caltrain parking structure, high density residential, and office uses. Under the CBD zoning, density could exceed the 40 units per acre allowed under the R-4 zoning, and offices could also be allowed, which the R-4 district does not allow.

8.5.1 *Comparison of Environmental Impacts*

Land Use

Development of Block 16 with a Mixed Use General Plan designation and CBD zoning district would allow for a mixture of residential and commercial uses on the site. The use of this site for mixed-use commercial and residential development along with continued parking facilities would have similar impacts as in other areas of the Downtown. Residential development allowed on this site would be generally compatible with both the approved high density residential development on Block 15 and the South County Courthouse on Block 17, given that the courthouse building is not a sensitive or incompatible use. Like the proposed project, design review will be required to ensure compatibility of new development, including ground floor commercial uses, with adjacent uses on Block 15. The Modified Land Use Alternative would not result in any greater land use compatibility impacts than the currently proposed designation.

Shadow sensitive land uses, such as parks, community facilities, and historic resources are not located in the area that could be shaded by 10-foot taller buildings on Block 16. Like the proposed project, development of Block 16 with a 55-foot building would result in shading of some residences east of Butterfield Boulevard during the late afternoon in Fall through Spring, with cast shadows somewhat longer than the proposed project. These types of shadows could be cast by the project under the currently proposed land use and the modified land use would not result in any new shade or shadow impacts.

Other Impacts

No additional significant impacts to transportation, noise, air quality, hazards and hazardous materials, and biological resources would result from the modified land use alternative.

8.5.2 *Feasibility*

Like the proposed project, the Modified Land Use Alternative would require modifications to existing General Plan designations and zoning.

8.5.3 *Relationship to Project Goals and Objectives*

The Modified Land Use Alternative would allow development of similar mixed-use projects as currently envisioned in the Downtown Specific Plan for the Downtown Core Area. Development of additional mixed-use development outside the Downtown Core adjacent to the Caltrain station and existing mass transit facilities would be consistent with the goals and objectives of the project.

8.6 MONTEREY ROAD NARROWING DESIGN ALTERNATIVE

The impact of the Project Alternate to the intersection of Monterey Road and Dunne Avenue identified in this EIR could be avoided by limiting the proposed narrowing of Monterey Road to between Main Avenue and Fifth Street, with a transition to four lanes between Fifth Street and Dunne Avenue.

8.6.1 *Comparison of Environmental Impacts*

This alternative would avoid the LOS impact to Monterey Road and Dunne Avenue when compared to the Project Alternate.

All of the other impacts of the Project Alternate would remain the same and the impacts of this modification to the Project Alternative are not discussed further.

8.6.2 *Feasibility*

The Monterey Road Narrowing Design Alternative is feasible from a land use and planning standpoint. Like the Project Alternate, this design alternative would require an amendment to the City's General Plan Circulation Element.

8.6.3 *Relationship to Project Goals and Objectives*

This design alternative would allow the same development as the Project and Project Alternate and would meet the basic objectives of the project.

8.7 COMPARISON OF ALTERNATIVES

When reviewing the various alternatives, it is important to keep in mind that the consideration of each alternative by decision-makers includes the evaluation of three basic questions:

1. Would the alternative avoid or substantially lessen any of the significant environmental effects of the project? In other words, is the alternative environmentally superior to the project?

2. Is the alternative infeasible from a land use, economic, physical, or regulatory standpoint?

3. Does the alternative meet most of the stated project objectives?

A brief discussion of each of these questions is provided below. Table 8.7-1, on page 290, provides a summary of the comparison of the project alternatives.

8.7.1 *Environmentally Superior Alternative(s)*

The CEQA Guidelines specify that an EIR must identify the environmentally superior alternative among those alternatives discussed. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. [Section 15126.6(e)(2)]

Based upon the previous discussion, the No Project Alternative would be the environmentally superior alternative. The No Project Alternative would avoid most of the significant impacts of the project while allowing for some intensification of development in the Downtown. The Reduced Scale Alternative would avoid the significant transportation and regional air quality impacts and lessen cumulative impacts of the project. The Location Alternative sites would reduce some of the project's impacts related to noise and vibration but would also result in greater land use, agricultural resource, air quality, and global climate change impacts. The Reduced Scale Alternative, therefore, is the environmentally superior alternative.

The Monterey Road Narrowing Design Alternative would be environmentally superior to the Project Alternate addressed throughout this EIR.

8.7.2 *Feasibility*

All of the alternatives included in the EIR are believed to be feasible from a physical and regulatory standpoint. The Reduced Scale Alternative would require modifications to the existing General Plan and zoning in the area and possibly the exemption for 500 units in the Downtown from the RDCS process. The economic feasibility of funding infrastructure, parking, lighting and landscaping improvements in the Downtown under the No Project Alternative would not be provided for given the lack of an area-wide implementation plan.

8.7.3 *Conformance with Objectives*

The No Project Alternative would meet some of the objectives of the project; however, it would not meet many of the basic objectives of the project such as a coordinated parking strategy and investment plan which are current impediments to greater downtown redevelopment. The Reduced Scale Alternative would allow for less intensification within the Downtown than the current General

Plan, which would not support the objectives in the Downtown Specific Plan for supporting Downtown businesses, encouraging redevelopment in the Downtown, and creating an active downtown through intensifying a mix of uses. The Location Alternative sites would not meet many of the project objectives related to strengthening the Downtown, supporting Downtown businesses or creating a downtown neighborhood.

The Monterey Road Narrowing Design Alternative would meet most of the basic objectives of the project.

Table 8.7-1
Comparison of Project Alternatives

Impact	Proposed Project	No Project Alternative	Reduced Scale Alternative	Location Alternatives	Modified Land Use Alternative	Monterey Road Narrowing Design Alternative
Impact TRANS-1: Monterey Road/Main Avenue 2015	SU	SU	LTS	LTS	SU	SU
Impact TRANS-4: Monterey Road/Main Avenue 2030	SU	SU	**LTS**	**LTS**	SU	SU
Impact TRANS-5: Main Avenue/Depot Street 2030	SM	**LTS**	**LTS**	**LTS**	SM	SM
Impact TRANS-1a: Monterey Road/Main Avenue 2015	SU	SU	LTS	LTS	SU	SU
Impact TRANS-2a: Dunne Avenue/Monterey Road 2015	SU	**LTS**	**LTS**	**LTS**	SU	**LTS**
Impact TRANS-4a: Monterey Road/Main Avenue 2030	SU	SU	**LTS**	**LTS**	SU	SU
Impact TRANS-5a: Main Avenue/Depot Street 2030	SM	**LTS**	**LTS**	**LTS**	SM	SM
Impact TRANS-6a: Main Avenue/Hale Avenue 2030	SM	**LTS**	**LTS**	**LTS**	SM	SM
Impact TRANS-7a: Dunne Avenue/Monterey Road 2030	SU	**LTS**	**LTS**	**LTS**	SU	**LTS**
Impact TRANS-8a: Main Avenue/Butterfield Blvd. 2030	SM	**LTS**	**LTS**	**LTS**	SM	SM
Impact TRANS-10: Parking	SM	**LTS**	**LTS**	**LTS**	SM	SM
Impact NV-1: Exterior noise	SU	SU	SU	SU	SU	SU
Impact NV-2: Interior L_{max} noise	SU	SU	SU	**LTS**	SU	SU
Impact NV-3: Vibration	SM	SM	SM	LTS	SM	SM
Impact NV-4: Construction noise	SU	SU	SU	SU	SU	SU
Impact AQ-2: Regional Air Quality	SU	**LTS**	**LTS**	SU	SU	SU
Impact AQ-5: Construction Dust	SM	SM	SM	SM	SM	SM
Impact HM-1: Soil/groundwater contamination	SM	SM	SM	SM	SM	SM
Impact BIO-1: Nesting Raptors	SM	SM	SM	SM	SM	SM
Impact C-TRANS-1: Intersection LOS	SU/SM	**SU/LTS**	**SU/LTS**	**LTS**	SU/SM	SU/SM
Results in Additional Significant Impacts?	No	No	No	Yes	No	No
Overall Environmentally Superior Alternative	--	--	**X**	--	--	--
Meets Project Objectives?	Yes	Partially	No	No	Yes	Yes

Notes: SM: Significant, but can be mitigated to a Less Than Significant Level SU: Significant, Unavoidable Impact;
NI: No Impact LTS: Less Than Significant Impact
Bold text indicates "environmentally superior to the proposed project"

SECTION 9.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

This section was prepared pursuant to CEQA Guidelines Section 15126.2(c), which requires a discussion of the significant irreversible environmental changes that would result from the implementation of a proposed project. Significant irreversible environmental changes include the use of nonrenewable resources, the commitment of future generations to similar uses, irreversible damage resulting from environmental accidents associated with the project, and irretrievable commitments of resources.

9.1 USE OF NONRENEWABLE RESOURCES

Future demolition of existing structures in the project area, construction, and operation of the proposed development allowed by the Specific Plan would require the use and consumption of nonrenewable resources. Renewable resources, such as lumber and other wood byproducts, would also be used. Unlike renewable resources, nonrenewable resources cannot be regenerated over time. Nonrenewable resources include fossil fuels and metals.

Energy would be consumed during both future construction and operation of the proposed land uses in the Specific Plan. The construction phase would require the use of nonrenewable resource sand energy would also be consumed during the manufacturing and transportation of building materials, preparation of development sites, and construction of buildings. The operational phase would consume energy for multiple purposes including, building heating and cooling, lighting, appliances, electronics, and commercial machinery (refer to *Section 3.12 Energy*). Energy in the form of fossil fuels would be used to fuel vehicles traveling to and from the area.

The proposed project would reduce nonrenewable energy consumption rates due to its proximity to mass transit facilities and through its use of energy-efficient building techniques, materials, and appliances to the satisfaction of the Community Development Director.

9.2 COMMITMENT OF FUTURE GENERATIONS TO SIMILAR USE

The proposed Specific Plan would change the land use designations on several parcels throughout the project area. The change in land use would place residential units in proximity to existing mass transit facilities which would encourage future generations to uses these services and reduce the amount of fossil fuels used in the Morgan Hill area. The proposed Specific Plan is located in a developed urban area and although the proposed project would represent a substantial increase in development in the project area it would not commit adjacent sites to similar uses.

9.3 IRREVERSIBLE DAMAGE RESULTING FROM ENVIRONMENTAL ACCIDENTS ASSOCIATED WITH THE PROJECT

The proposed Specific Plan does not propose any new or uniquely hazardous uses, and operation of development in the project area would not be expected to cause environmental accidents that would impact other areas. The Specific Plan project area is located within a seismically active region and would be exposed to ground shaking during a seismic event.

Conformance with standard engineering practices in the California Building Code would reduce impacts from seismic hazards to redevelopment in the Specific Plan project area. Redevelopment in the Specific Plan project area with the implementation of the standard measures identified in *Section*

3.5 Geology and Soils would avoid significant geology and soils impacts on future redevelopment and would not likely result in irreversible damage that may result from environmental accidents.

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